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ABSTRACT

This report on the United States of America is one in a series of country studies prepared in the framework of the Organization for Economic Cooperation and Development (OECD) Education Committee activity on changing patterns of finance in higher education. The United States maintains the largest and most diverse system of higher education in the world, and the principal external influence since 1970 is population demographics. Other influences are economic change and the political environment. U.S. postsecondary institutions have been adequately financed by a complex scheme of public and private, direct and indirect financing, but because of external forces, they have been required to become more entrepreneurial and adaptive. Five sections provide information on the following: (1) current policy debates: finance, costs, and expenditure plus recent studies in higher education finance; (2) patterns of financing U.S. higher education; (3) student financial assistance; (4) recent changes in organization and mission; and (5) forecasting the near future. Appended are 13 tables and charts including current-fund expenditures, federal obligations to universities and colleges by agency, revenue of institutions of higher education, expenditures of institutions of higher education, federal aid awarded to postsecondary students, and estimated direct expenditures for education in the United States for 1986-1987. (SM)

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CHANGING PATTERNS OF FINANCE IN HIGHER EDUCATION

COUNTRY STUDY: UNITED STATES OF AMERICA

JULY 1988

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CHANGING PATTERNS OF FINANCE

IN HIGHER EDUCATION

COUNTRY STUDY: UNITED STATES OF AMERICA

This report is one of a series of country studies prepared in the framework of the OECD Education Committee activity on Changing Patterns of Finance in Higher Education. These studies have provided the background information for the preparation of a general report on this topic that will be published by the OECD.

The country study on the United States of America has been written by Dr. C. Ronald Kimberling, former Assistant Secretary for Postsecondary Education, U.S. Department of Education, and Dr. Joel West, currently with the Office of Postsecondary Education, U.S. Department of Education. Assistance in compiling the Appendix was provided by Mr. Robert Tuccillo of the U.S. Office of Management and Budget. The views expressed are those of the authors and do not necessarily commit the national authorities concerned or the Organization.

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EXECUTIVE SUMMARY

The United States of America maintains the largest and most diverse system of higher education in the world, with more than 3300 accredited "traditional" institutions of higher education as well as some 8,000 private, postsecondary career schools. Historically, funding has come from a number of sources, including the Federal government, state and local governments, students and their families, private philanthropists, corporations, and the sale of various goods and services, including research. The mix of funding sources differs considerably from state to state and between public and private institutions.

The principal external influence on U.S. higher education since 1970 has been population demographics. The pendulum has swung from high numbers of traditional (18-24 year old) students generated by the post-World War II "baby boom" to low numbers of the same age cohort in recent years. Another influence has been economic change, particularly the need to adapt to high energy costs and high inflation levels in the 1970s. Finally, the political environment has generated a great deal of pressure on institutions to improve curriculum quality and more accurately measure student performance. All these external influences have forced higher education institutions to adapt and modify their organizational structures and overall missions.

During the period 1969-70 through 1984-85, there was considerable growth in institutional revenues and expenditures. In constant (inflation-adjusted) 1980 dollars, revenues increased from $ 48.3 billion in 1969-70 to $ 74.2 billion in 1984-85. During the same period, full-time equivalent (FTE) student enrollment rose from 6.3 million to 8.9 million. FTE expenditures, measured in constant dollars, rose from $ 7,526 per annum in 1969-70 to $ 8,065 in 1984-85, thus running somewhat counter to the experience of many OECD nations.

Despite this relatively "optimistic" scenario, it should be noted that higher education has been under considerable pressure from a number of sources, including government officials, to improve measurable student performance, expand curricula to meet the challenges of global economic competitiveness, and help students overcome academic deficiencies engendered by a weakened elementary and secondary school system. Therefore, in order to be "all things to all people," institutional investment has been expanding in better faculty, better equipment, remedial curricula, and various "academic support" personnel.

During the 15-year period from 1969-70 to 1984-85, the traditional "mix" of public and private funding for postsecondary education has not been radically altered. Three notable changes have taken place, however. First, Federal priorities have shifted dramatically, from an emphasis on capital construction and "infrastructure" development in the late 1960s to a major thrust in portable student financial assistance by the mid-1980s. At the state level, there has been a general expansion of financial support, but the picture is complicated by significant changes (both positive and negative) in the economies of several states. Finally, private sector giving has expanded rapidly in the 1980s, increasing from $ 2.1 billion in 1980-81 to $ 3.1 billion in 1984-85.

The rapid growth of student financial assistance programs has not been without its share of problems. Total Federal appropriations for student aid grew from $ 530 million in 1969-70 to $ 6.2 billion in 1984-85. These funds leveraged a total of $ 1.3 billion in funds available to students in 1969-70 and $ 13.4 billion in 1984-85. Over this 15-year period, major changes included creation of a significant, means-tested, voucher-like national grant program (Pell Grants) and diminution of non-means-tested aid such as veterans and Social Security entitlements. Currently, the major topic of policy debate has been the reform of the structurally flawed guaranteed student loan program.

In summary, we find that U.S. postsecondary institutions have been adequately financed by a complex scheme of public and private, direct and indirect financing, but that they have been required by a variety of external forces to be more entrepreneurial and adaptive. There has been a significant growth in private, for-profit, career training schools, especially during the past decade. Traditional institutions have, of necessity, adopted creative marketing strategies to attract both traditional and non-traditional students. Students today have a greater degree of "control" over higher education, "voting" in a sense, with their student aid dollars. Governmental authorities, especially at the state level, have teamed up with a private sector concerned with international competitiveness to force institutions to become more accountable.

I. INTRODUCTION

The United States of America maintains the largest and most diversified system of higher education in the world. There are currently more than 3300 accredited public and private, two- and four-year "traditional" institutions of higher education, as well as some 8,000 private, postsecondary career schools. For the most part, this country report will focus on the traditional colleges and universities, although occasionally the private career schools (or "proprietary schools") will be touched upon, since some aspects of financing cannot be completely understood without their inclusion. Taken together, colleges, universities, and private, for-profit career schools in the U.S. are included under the umbrella, "postsecondary education."

The principal influence on higher education in the U.S. since 1970 has been population demographics. Like most Western democracies, the United States has witnessed significant shifts in the numbers of 18-24 year-olds. The so-called "Baby Boom" generation born in the years immediately following World War II created a massive bulge in the college-going population, beginning in the mid-1960s. In the U.S., the maturation of this generation coincided with the Civil Rights movement and successful political efforts to significantly increase access to higher education. The result was a two-fold increase in college and university enrollments, from some five million in the early-mid 60s to ten million by the mid-70s.

In the past ten years, however, the pendulum has swung around. U.S. birthrates declined significantly all through the 1960s, resulting in a sharp decline in the numbers of available traditional college-age students by the mid-80s. Nevertheless, postsecondary education enrollments have held reasonably steady at approximately 12.5 million (1986-87). Creative marketing seems to have been the chief cause of this success; higher education institutions have worked arduously to attract more part-time, foreign, and non-traditional students, in part by altering curricula to attract a new and different student clientele.

Economic change has also affected the development of higher education. On the macroeconomic level, broad shifts in the U.S. economy from manufacturing to service industries have affected demand for higher levels of educational attainment amongst the workforce. The twin demons of energy crises and inflation had a major impact in the 1970s. On one hand, institutions of higher education were hit hard in their annual budgets. Academic outlays

were forced to partly give way to ineluctable increases in administrative expenditures, simply to keep buildings properly heated and lit, but also to expand administrative functions and services to handle non-traditional and underprepared students. On the other hand, there is some evidence that fears about economic stability may have played a role in influencing student curricula choices. Beginning in the mid-70s, there were vast falloffs in enrollments in traditional liberal arts subjects such as history, literature, and philosophy, and significant increases in enrollments in accounting, business administration, and some fields in engineering.

The political arena has also been a major influence on changes experienced by U.S. higher education in recent years. On the national level, higher education remained in the background in 1970. While the Federal government provided significant sums for support of scientific research and, to a lesser degree, construction of academic facilities, Federal programs of grant and loan assistance to students were quite small compared to the present. The Vietnam War and civil rights for minorities were the dominant issues; higher education sat in the back seat. In the 80s, however, matters became quite different. The nationwide educational reform movement, spurred on by the 1983 report of President Reagan's National Commission on Excellence in Education, grew from its original emphasis on elementary and secondary education to embrace higher education as well. The past few years have seen a number of well-publicized reports on higher education reform, including the U.S. Department of Education's Involvement in Learning,(1984) and the Carnegie Commission's College: The Undergraduate Experience(1986). As a result of these reform-oriented reports and related efforts by higher education trade associations to link support for higher education with improved economic competitiveness, the U.S. Congress has shown a willingness to increase funding for higher education, despite the pinch of deficit spending on the overall domestic program budget.

At the state government level, interest in higher education has undergone a similar transformation. In the early 1970s, governors and state legislators generally took a dim view of academe. Student protests of the late 60s had seriously eroded higher education's image, and few in state government wished to champion colleges and universities. In recent years, again largely as a result of the nationwide educational reform movement, state political leaders have "discovered" higher education. Under the U.S. federalist system, the states actually have a stronger hand in financing and regulating education than does the national government. As a rule of thumb, approximately 50 percent of a typical state's budget goes toward education. Thus, once governors and state legislative bodies discovered this latent power, they began in earnest to "improve" higher education. In a number of states (e.g., New Jersey), support for higher education has been politically linked with economic revitalization, the ar-

gument being that a well-educated population will attract industry, since business will have to invest less in hiring and training a top-notch workforce. In other states, provincial "pride" is invoked by politicians as a rationale for investing in top quality public institutions of higher education. Regardless of the reasons given, there is no doubt that the various states have undergone a major shift in attitude and interest in higher education in the past 15 years.

Current Policy Debates: Finance, Costs, and Expenditure

The degree of interest in higher education financing has increased significantly in the United States in recent years. Perhaps this is due to the public's general interest in educational reform. Perhaps it is due to spirited and well-publicized political debates about the high price of a college education in terms of tuition and fees paid by students and their families. Perhaps the interest is due to the crossing of two important psychological barriers in recent years: more than $ 100 billion spent on higher education annually and more than $ 50,000 for a four-year undergraduate education at some universities. Whatever the cause, the conversation is about money and more money.

Rational analysis of higher education finance in the United States is made complex by the fact that direct funding comes from so many different sources: the Federal government; state and local governments; student fees; private philanthropy; sales of various services for fees; and investments of endowment funds. Add to this various categories of indirect funding, notably through the complex national tax system, and one begins to understand how difficult it is to portray exactly how much money is spent on higher education in America.

According to statistics compiled by the U.S. Department of Education's Center for Education Statistics (NCES), total revenue realized by institutions of higher education increased from $ 21.5 billion in 1969-70 to $ 92.4 billion in 1984-85. In constant 1980 dollars, revenues increased from $ 48.3 billion in 1969-70 to $ 74.2 billion in 1984-85. Full-time equivalent student enrollment rose from 6.3 million in 1969-70 to 8.9 million in 1984-85. On a per capita FTE student expenditure basis, therefore, actual revenues changed from $ 7,526 per FTE student in 1969-70 to $ 8,065 per FTE student in 1984-85, in constant 1980 dollars. Expenditures generally kept pace with revenues, although by the mid-1980s, institutions of higher education were running slight annual surpluses, with the "profits" generally being reinvested in endowments, used to accelerate retirement of capital debt, or put toward expansions or improvements in the caliber and depth of particular programs or laboratories. This latter expansion often has image enhancement-marketing goals in mind.

Despite this relatively "rosy" scenario, one hears numerous cries for additional funds for higher education. Advocates for greater expenditures of public funds tend to be well-organized, both in Washington, D.C., and various state capitals. Higher education is presented as an investment in the future, with dire threats of economic disaster if broader postsecondary opportunities are not made available to the next generation of students. Real or anticipated cutbacks in Federal financial assistance are used to justify requests for increases in state funding, while lackluster economies in certain states are used to justify an expanded role for Federal financial assistance. The fear of diminished public support from all levels of government is used to buttress appeals to the private sector for increased philanthropic support. In short, all possible rhetorical roads are well-travelled.

Recently, prompted by several critical speeches made by U.S. Education Secretary William J. Bennett, there has been a conservative "backlash" to the organized higher education lobby. Bennett has charged that many colleges and universities have raised student tuition and fees to whatever limits the market will bear, in part because so much of these payments are subsidized by Federal financial aid to students. Bennett makes a number of subsidiary arguments, including the charge that tuition hikes at some colleges are based on the premise that student-consumers and parents will not value an education costing less than the prestigious Ivy League schools. Bennett notes that prices charged to students and their families have gone up far in excess of inflation during the 1980s.

Bennett's comments have angered the higher education Establishment, prompting serious and somewhat emotional rebuttals. The National Association of Independent Colleges and Universities (NAICU), for example, rushed out a report purporting to give the "facts" on higher education costs, for fear that some of Bennett's remarks were being taken as an indictment of private colleges and universities. While it is true that Bennett's figures on tuition price rises failed to reckon with the fact that direct state subsidies of public universities enabled them to somewhat artificially maintain lower "retail" tuition prices, compared with their private colleagues, the histrionic tone of the NAICU report reflected a genuine concern among organized higher education groups that Bennett's criticisms were beginning to penetrate middle class households.

By and large, however, American public policy is rather settled with respect to the general pattern of financing higher education. Most politicians and educators are satisfied with the "mixed economy" approach to higher education finance. Almost no one would seriously argue that all universities should be nationalized, or that the Federal role in supporting higher education should be completely eliminated. The most liberal member of the

U.S. Congress wouldn't dream of setting national standards for hiring and remunerating university faculty members, while the most conservative member would as soon resign as give up voting for basic research subsidies related to national defense. In short, while there have been some significant transformations in specific programmatic **mechanisms** for allocating funds to institutions of higher education over the past 15 years, especially, as we shall see in Chapter 3 in the growth of Federal student financial assistance programs, there has not been a fundamental change in the heterogeneous mix of funding sources.

In short, U.S. spending for higher education has climbed steadily. Citizens of the United States are continuing to invest in education. The preponderance of that investment has been and continues to come from state, local, private, and family (including the student) resources. Only about 12 per cent of total expenditures for postsecondary education come directly from Federal sources (See Statistical Appendix table on estimated direct expenditures for education in the U.S. for 1986-87). Citizens want quality education, and they are willing to pay for it.

Many demographic, environmental, and perceptual factors contribute to the financial realities and challenges of higher education today. Those factors can be most meaningfully understood when they are looked at interactively, rather than in isolation. Indeed, much of the public discussion about rising higher education costs is limited by the fact that individual factors which co-vary with increasing costs are assessed in isolation.

It is important to recognize the interactive effects of many factors upon increasing financial costs for an education today in the United States. Furthermore, the public's perception of the relative costs of higher education across postsecondary institutions with a mindset that "you get what you pay for" needs to be fathomed, in order to understand the stable volume of student enrollment in postsecondary education today against the significant demographic changes mentioned earlier. Finally, all of this needs to be viewed against the backdrop of the reality that higher education today is a "buyer's market."

The principal goal in education across all sectors and all levels--kindergarten through doctoral training--is that of **optimally developing human resource capital**. To accomplish that goal, colleges and universities have always been scrambling for resources. In all probability, they will be forever scrambling for resources.

That scramble is intensified by the fact that institutions, in today's market, are compelled to the extent possible to continually upgrade the quality and caliber of their educational

services and programs. In this labor-intensive venture, any extra resources are invested in the enhancement of program quality. This drive to improve is motivated by: 1) a keen desire to deliver the best possible educational/training services, and 2) a clear marketing strategy of how to attract sufficient numbers of high caliber students.

These are challenging times for institutions of higher education. Those challenges, both financial and curricular, will continue to be with institutions of higher education into the twenty-first century and beyond.

Recent Studies on Higher Education Finance

What follows here is an annotated bibliography of selected publications on postsecondary education financing. Those reports mentioned here have primarily been sponsored by the U.S. Department of Education. The majority of these selections focus upon financial and administrative aspects of institutions of higher education. Several selections focus upon financial assistance to students, against the backdrop of increasing educational costs.

By and large, these materials are available through the Educational Reference Center, Information Services, in the Office of Educational Research and Improvement, U.S. Department of Education.

Undergraduate Financing of Postsecondary Education: A Report of the 1987 National Postsecondary Student Aid Study. Korb, Roslyn; Schantz, Nancy; Stowe, Peter; and Zimbler, Linda of the National Center for Education Statistics (NCES), 1988.

Student financial aid programs, both Federal and non-Federal, have played an important role in postsecondary education. Policy makers throughout the Nation have had need for information on the distribution of financial aid, the nature of aid packages, the profile of aid recipients, the pattern of financing postsecondary education, and the impact of financial aid program changes on students, their families, and postsecondary institutions. To meet this need for information, NCES launched a comprehensive study: The 1987 National Postsecondary Student Aid Study (NPSAS).

For this 1987 study, a sample of more than 59,000 postsecondary students enrolled in the fall 1986-87 school year was selected. For the first time, estimates of many financial and demographic variables within the student clientele became available for the same population at the same time. Although this cross-sectional study has produced credible estimates, these data will underrepresent the total number of students receiving aid, since not all students in a financial aid program are enrolled on a par-

ticular day in October of a given school year. There are additional differences across postsecondary sectors. Nevertheless, this first report on NPSAS data is of major significance, is highly credible, and will have a major impact on future student aid program policies.

Higher Education Administrative Costs: Continuing the Study. Snyder, Thomas P. and Galambos, Eva C. (OERI), 1988.

Costs associated with colleges and universities are addressed in this two-part report. Part One, a 20-page overview, Snyder's "Recent Trends in Higher Education Finance, 1976-77 to 1985-86," reviews rising national trends in tuition, enrollment, degrees, expenditures, and expenditure per student. A wide diversity is noted among institutions in each classification and in different regions of the U.S. Numerous graphs and tables supplement the narrative. In Part Two, the focus piece of the report, "Higher Education Administrative Costs and Staffing," Galambos examines the place of administrative costs in the pattern of expenditures, analyzing elements of the rise in costs. National trends in administrative and support functions, including expenditure and staffing patterns, are reviewed.

Current Funds, Revenues and Expenditures in Institutions of Higher Education: Fiscal Year 1985. National Center for Education Statistics, 1987.

Current fund revenues and expenditures at two-year and four-year U.S. colleges and universities are reported for fiscal year 1985, based on findings from the Financial Statistics of Institutions of Higher Education survey, which is part of the HEGIS survey. Narrative summaries of the findings are presented, along with data on: current funds revenues for colleges by source and by level and control of the institution: current funds expenditures and mandatory transfers of colleges by function and type of institution; student-related current funds revenues and expenditures per FTE student by type of institution; tuition and fees of colleges by region and state and by type of institution; local, state, and federal appropriations to colleges by region and state and by level of institution; educational and general expenditures; and scholarship and fellowship awards from restricted and unrestricted funds of colleges. It was found that both revenues and expenditures increased nearly 10 % between FY 1984 and FY 1985 at all higher education institutions, despite declining FTE enrollment.

State Policies and Independent Higher Education: A Conceptual Framework and Some Empirical Findings, or Can the States Help the Private Sector Survive? ASHE Annual Meeting Paper. Zumeta, William and Green, Kenneth C., (OERI), 1987.

Results of a study concerning the relationships between state policies and private college enrollments, enrollment demographics, and finance are presented. After considering national enrollment trends in the independent sector, attention is directed to the impacts on private colleges of state fiscal policies, including aid to private colleges and their students as well as tuition levels in the public sector. Also considered are results of research in five states on the nature and impacts on the private sector of states' higher education planning and program review policies, as well as policies toward information collection and dissemination in higher education.

Higher Education Finance Trends, 1970-71 to 1983-84. National Center for Education Statistics, 1986.

Trends on sources of funds and expenditures for U>S> colleges is presented for 1970-1984, based on the Higher Education General Information Survey. Trends in sources of funds for public colleges include: the proportion of revenues derived from tuition rose from 13 % in 1975-76 to 14.9 % in 1983-84; between 1977-78 and 1983-84, the share received from the federal government fell from 12.8 % to 10.5 %; the state government share rose from 1975-76 to 1979-80, but then fell slightly; the portion of revenues from local governments decreased from 5.6 % in 1975-76 to 3.6 % in 1983-84; and the share from gifts, grants, and contracts rose from 2.3 % to 3.0%. Changes in revenue sources for private colleges showed a similar pattern.

Higher Education Financing in the Fifty States, Interstate Comparisons, Fiscal Year 1984, Fifth Edition. Christal, Melodie E., et al, National Center for Higher Education Management Systems, 1986.

Information on state-level financing in higher education and on institutional revenues and expenditures is presented for fiscal year 1984, with trend data to FY 1980. In addition to a narrative analysis, extensive statistical tables show state rankings on about 50 factors involved in higher education finance. The state rankings cover state and local government finances, support of colleges and student financial aid, enrollment trends, and other trend data.

Conditions Affecting College and University Financial Strength: Higher Education Panel Report Number 63. Andersen, Charles J. of the American Council on Education, sponsored by the U.S. Department of Education, the National Endowment for the Humanities, and the National Science Foundation, 1985.

Conditions affecting the financial status of colleges and universities during 1980-84 were investigated, with a focus on self-help in the form of management practices and strategies. Questionnaires were completed by some 370 institutions belonging to the Higher Education Panel. The data were weighted to represent the national population of colleges and universities, excluding research universities.

How States Compare in Financing Higher Education, 1984-85, Eighth Edition. Halstead, Kent, NIE, 1985.

Fiscal year appropriations and supporting data are presented for comparative analysis of state financing of public higher education. The report is based on the fall collection of state appropriations data reported by M. M. Chambers. It presents a model of state rankings for seven independent factors plus eight derived measurements that together represent the principal state conditions and financial actions underlying and governing appropriation levels.

Higher Education: A Bibliographic Handbook. Vol. 1. Halstead, Kent D., editor, NIE, 1984.

A bibliography of readings in higher education, which covers 1968-1981, deals with subjects generally approached from an aggregate state or national perspective. For each publication, the following bibliographic information is provided: title, author(s), publisher, and number of pages, and abstracts. Subject and author indexes are included. The topical areas are as follows: comparative national systems; demography; economics; educational opportunity, finance, governance and coordination; history; independent higher education; institutional role an d mission; quantitative approaches to management; philosophy; policy and general reference; productivity and cost-benefit analysis; research and research administration; resource allocation and budgeting; student characteristics and development; student financial assistance; and work and education.

Higher Education Budgeting at the State Level: Concepts and Principles. Jones, Dennis P. of NCHEMS, sponsored by NIE, 1984.

New approaches to allocating state resources to colleges are discussed. Budgeting and resource allocation principles are considered that: (1) reflect the unique context of higher education; (2) are consistent with sound budgeting and management principles; (3) represent institutional mechanisms applied at the state level rather than approaches developed expressly to reflect state priorities. To form the basis for a set of first principles for state-level resource allocation, the following concepts are addressed: the link between budgeting, planning, and accountability; governance relationships; production functions in higher education; and key structural components of the budget.

Monitoring the Financial Condition of Colleges ands Universities: AAHE-ERIC Higher Education Research Currents. Taylor, Barbara of AAHE, sponsored by NIE, 1984.

Efforts to monitor the financial condition of colleges and universities have arisen from concerns about the effects of economic and demographic pressures. Researchers have attempted to monitor financial condition through two types of research; subjective studies and objective financial indicator studies. Subjective analyses can be useful for gauging constituent satisfaction with financial performance and priorities. Efforts to create objective indicators reflect a desire to monitor measurable changes in financial condition and to maintain financial strength through the effective use of available resources. An example of a commonly used financial indicator is the ratio of instructional expenditures to total educational and general expenditures. Some financial indicators may entail nonfinancial data (e.g., the ratios of new freshmen to total applicants accepted). The interpretation of a financial indicator rests on an assumption of what constitutes "sound" financial condition. For example, overreliance on tuition income is frequently cited as evidence of weak financial condition. The assessment of institutions can be undertaken by experts or based on a theoretical framework.

State Funding of Public Higher Education: Improving the Practice: Proceedings of a Working Conference. Brinkman, Paul, of NCHEMS, sponsored by NIE, 1982.

Summaries of conference discussions on state funding of public higher education are presented. Attention is directed to the practice and the context of state funding. The following topics are addressed: current state priorities and relationships between state government and publicly-supported institutions, funding for quality, incentives in the budget, management flexibility, higher education costs, funding formulas, and research agenda. Specific issues include: changes in the means for ensuring accountability,

the importance of trust in the state-institutional relationship, the degree of concern about quality in higher education, the kind of budget provisions that are likely to enhance quality, the way that incentives relate to state policies, the proper distribution between the state and the institutions of the responsibility for managing institutional budgets, leadership and flexibility, problems inherent in basing tuition rates on the costs of instruction, the role of marginal costing in higher education funding, and progress in costing studies.

Trends in Institutional Financing: Practitioner Report. Brinkman, Paul of NCHEMS, sponsored by the U.S. Department of Education, 1982.

Data concerning higher education revenues during fiscal years 1973-1980 were collected. Four institutional perspectives were examined: market shares, sources of revenue, fund balances, and unit revenues. Six consumer-investor dimensions were also covered: the shares from federal, state and local governments; private donors' share; the school's share; the student and family's share; and the total amount of resources going to higher education by source.

Formula Budgeting for Higher Education: State Practices in 1979-80. Gross, Francis M. of NCHEMS, sponsored by NIE, 1982.

Budget formulas used by states for state-supported colleges and universities are described, along with budgeting guidelines. A comparative analysis of the budget formulas in use in 1979-80 reveals the similarities and differences in design among 19 states. Functional areas of expenditure used in the formula calculation are also compared for each state, including instructional and academic support, research and public service, libraries, student services, institutional support, and physical plant operation. For each state and functional area, information is also provided on formula methods for developing requests, including line items, base factors, formula factors, and the method of calculation.

II. PATTERNS OF FINANCING U.S. HIGHER EDUCATION

In a broad sense, there are two models followed in the United States with respect to the funding of institutions of higher education, one for state-supported or "public" colleges and universities and a second model for private or "independent" (as they prefer to be called) colleges and universities. Both models are described below, though the reader should be warned in advance that due primarily to differences in state law, there is considerable variety throughout the U.S.

Public colleges and universities are chartered under the laws of the state within which they are located. Generally speaking, there are no "national" universities in the United States, unless one counts the armed services academies and one or two anomalies of history such as Howard University, an historically Black institution located in Washington, D.C., which received a Federal charter during the Lincoln Administration and which still receives a sizable direct annual appropriation of funds from the Federal government and Gallaudet University, a specialized institution for hearing-impaired students established in Washington, D.C. in 1857.

State-supported colleges and universities are usually part of a multi-campus "system" governed by an appointed board of trustees and directly administered by a campus head (a president or chancellor) who is accountable to a system-wide head chosen by the governing board. Typically, the principal source of revenue for public colleges and universities is an annual appropriation of funds from the state legislature. In some states, funds are allocated campus-by-campus, while in others a lump sum is appropriated for the entire system and subsequently divided up by the board of trustees. The funding formula is principally driven by FTE enrollment, though in most states certain "flagship" campuses are alloted additional funds in recognition of their special role in conducting research or maintaining higher standards of quality. As one can readily imply, even from this brief description, state appropriation decisions are usually strongly influenced by politics.

An additional source of revenue for public institutions of higher education comes from tuition and fees paid directly by students. One finds major differences among the U.S. states in the percent of total student per capita expenditures covered by these fees. In the New England states, where a strong tradition of private higher education was forged early in American history with the founding of institutions such as Harvard and Yale, tui-

tion charges for public university students tend to be rather high, half or more of the total cost of education. The Midwestern and Western states, however, developed later in American history and were strongly influenced by the kind of populist sentiment that gave rise to the public land grant colleges and universities in the mid-nineteenth century. Consequently, one tends to find low tuition charges in these regions. In California, for example, students pay only $ 100 per year in fees to attend any one of more than 100 two-year community colleges. To cite another example, annual tuition and fees at the world-renowned University of California-Berkeley were only $ 1346 per year in 1987, compared with $ 3198 at the University of Vermont.

While the aforementioned represent the majority of funds received by public institutions, there are numerous additional sources of revenue, including:

-- direct grants from the Federal government for land-grant universities and historically Black colleges;

-- sponsored research grants, generally given on a competitive basis, from the Federal government, state and local governments, and private corporations;

-- funds appropriated by local government agencies (more common in the case of community colleges than for four-year institutions);

-- gifts from private corporations, foundations, and alumni;

-- revenues generated from sales of patents and inventions and from such auxiliary enterprises as athletics, student residence facilities, cafeterias, and campus bookstores;

-- investment income from endowment funds.

There are notable categories of indirect support as well. For example, charitable gifts from corporations and private individuals may generally be itemized as a tax deduction, thus lowering the tax liability for the giver and representing an indirect form of public "subsidy" to the institution. In addition, the fact that public institutions of higher education are exempt from paying many taxes that would ordinarily be charged to private, for-profit enterprises means that the cost of doing business is lowered for such auxiliary enterprises as the student bookstore and the food service operation.

Financing for private, non-profit or "independent" colleges and universities follows a markedly different path from public institutions. Private institutions do not receive annual appropriations of funds from state legislatures or local governments. Understandably, this means that a much higher percentage

of revenues for private schools must come from tuition and fees paid by students. In a few states, "tuition equalization" laws have been passed to help subsidize private higher education. For example, in North Carolina, private colleges receive $ 1500 per year from state funds for every full-time student, which, in essence, "buys down" the price of tuition. The rationale behind such laws is that the state government would be spending much more on public higher education if private universities did not exist. Few states have passed such legislation at this time, but the trend may be toward this model.

Of course, private institutions receive income from all the other sources previously enumerated for public institutions. One significant different is that gifts from the private sector and endowment investment income typically are much more prominent sources of revenue for private colleges than they are for public institutions. Also, as one might imagine, private institutions are more keenly aware of the indirect benefits conferred by various tax policies. Private colleges bitterly complained about a number of changes in the 1986 revision of the Federal tax code, for example, the elimination of a steep depreciation allowance for charitable gifts of real property. More recently, private institutions have attempted to obtain reinstatement of a Federal tax provision that allowed employers to deduct the cost of tuition and fees paid on behalf of their employees, an indirect educational subsidy that has been prized by all sectors of U.S. higher education, but most especially by the private colleges.

This discussion would not be complete without a brief treatment of the private, for-profit career schools, the so-called "proprietary" sector. As mentioned in Chapter One, there are some 8,000 accredited proprietary schools in the U.S., mostly providing short cycle (six-months to one-year) courses in practical trades such as cosmetology or diesel engine repair. These schools are all tax-paying, for-profit enterprises, and they receive no direct state appropriations. However, proprietary schools are eligible under Federal law to participate in national student financial aid programs such as Pell Grants and Guaranteed Student Loans. By 1987, nearly one-fourth of Federal Pell Grant dollars were being used by proprietary schools, a fact that has not escaped the notice of "traditional" institutions of higher education. Proprietary schools also frequently benefit from Federal and state labor training programs, such as the national Job Education and Training Partnership Act.

Overall, while the mixture of private and public funds has been the norm for higher education financing, there have been a few changes worth noting:

At the Federal level student financial assistance programs have grown rapidly during the period 1969-70 through 1984-85. During the same period, Federal funds for capital con-

struction have fallen off dramatically, primarily because the need has been met to rapidly build campuses for the Baby Boom generation. Concern over aging physical plants, however, may give rise to new Federal programs in this area. Finally, one notes a slight decline (in constant dollars) in Federal support for basic research in the late 1970s, followed by increases during the 1980s.

At the state level the picture is more diverse, given the differences among the states in providing support for higher education. By 1969-70, most states were experiencing the end of an era of rapid expansion for public higher education, an expansion needed to accommodate the post-war Baby Boom generation. Throughout the 1970s, many states were struggling financially with the problems of inflation and high interest rates. Consequently, support for higher education was made difficult. In the 1980s, most states have significantly increased financial support, although economic problems in certain areas (e.g., oil-producing states such as Texas and farm-belt states) have slowed things down.

Private sector giving has experienced major growth during the 1980s. Total philanthropic gifts to higher education have risen from $ 2.1 billion in 1980-81 to $ 3.1 billion in 1984-85 (Source: **Digest of Education Statistics: 1987**). Universities have also expanded university-owned enterprises from patent sales to catering, to the point where Congressional tax committees have held oversight hearings on whether such "business enterprises" should be regulated or restricted. Finally, major tax reform legislation passed in 1986 is just now being phased in. While tax reform simplified the national tax code and lowered the overall tax rate, it also eliminated many deductions for charitable giving. Whether these changes have a lasting effect on private donations to higher education in the future is a matter of speculation.

III. STUDENT FINANCIAL ASSISTANCE

Student financial assistance in the United States has become big business in recent years. At the Federal government level, in 1987-88 some nine billion dollars were appropriated for student aid programs authorized under the Higher Education Act, funds which in turn leveraged $ 15.6 billion in aid available to postsecondary students. All this makes student financial aid the largest single category of financial support provided by the Federal government to higher education.

Indirect funding of higher education through student aid was not always the preferred mode for Federal support. Historically, the Federal role in education grew slowly, inasmuch as the U.S. Constitution does not even mention education as a responsibility of the national government. Beginning with the Northwest Ordinance of 1788, however, which specifically set aside territorial lands for educational facilities, the U.S. Federal government has evolved a specific, but limited, pattern of support. In 1863, the first Morrill Act was signed into law by Abraham Lincoln, setting aside large grants of land to be used as an endowment for state universities (the so-called "land grant" colleges). The second Morrill Act of 1890 expanded this support and added funding for agricultural research. Targeted support for research, especially in the national defense, agricultural, and health care fields, grew throughout the early years of the twentieth century. By 1950, the Federal government was authorized to provide funds to higher education in numerous ways: veterans' educational grants; National Science Foundation grants for research; and even low-interest loans for the construction of student residence facilities.

Although a limited number of competitive fellowships were available from the Federal government for graduate study, general financial assistance for needy college students did not begin until the National Defense Education Act (NDEA) was passed in 1958. Among other programs authorized by the NDEA was the National Defense Student Loan (NDSL) program, a scheme of low interest loans made available to students on the basis of financial need. Federal funds were distributed to colleges and universities participating in the NDSL program, and these institutions, in turn, served as direct lenders to students. The student made no payments on the loan so long as he or she pursued a full-time course of study. After graduation, the loans were repayable to the college or university over a 7-10 year period at a three percent rate of interest. Because the NDSL program was directly administered by colleges and universities, it became known as a campus-

based student aid program. In theory, the reflow of payments from earlier loans would eventually eliminate the need for additional Federal capital, but in practice, new capital funds have been appropriated by Congress every year since 1959, the first year of funding for the new NDSL program.

In 1964, President Lyndon Johnson added a second Federal student aid program, College Work-Study (CWSP). Administered by the now-defunct Office of Economic Opportunity, CWSP provided direct grants to colleges and universities to provide 80 percent (originally 90 percent) of the cost of salaries paid to financially deserving students for part-time employment. Institutions of higher education provided the balance. The CWSP program was politically popular, since it appealed to the old-fashioned work ethic of "earning one's way through college," in contrast to direct grants modeled on European lines.

Both the NDSL and CWSP programs were incorporated in the 1965 Higher Education Act (HEA), a major piece of Congressional legislation that has remained to this day as the chief "umbrella" for Federal student aid and institutional support programs. Two new programs were added by the 1965 HEA, Educational Opportunity Grants and Guaranteed Student Loans (GSLs). The original Educational Opportunity Grant program, like NDSL and CWSP, was a campus-based program. Federal funds were allocated to colleges and universities. These institutions, in turn, were authorized to distribute annual grants of not more than $ 800 (the current limit is $ 4000) to the most financially needy students. The GSL program established a new model, whereby Federal funds were used to pay interest subsidies to private banks and to guarantee such loans against loss due to default, death, or permanent disability. The theory behind this model was that Federal funds merely compensated for imperfections in private capital markets, imperfections that prevented private lenders from being willing to loan money for educational purposes to young students with no collateral and no previous credit history. It was also assumed that using public funds to leverage private capital would be less expensive than directly appropriating capital funds.

These four programs--NDSL, CWSP, Educational Opportunity Grants, and GSL--were the core of Federal student aid in 1969-70. In that year, Congress appropriated $ 530 million for these four programs, which in turn provided $ 1.3 billion in total funds available for students. While a total of two million awards were made under these four programs, one must keep in mind that eligibility for assistance under these programs was not mutually exclusive. Many students--especially the poorest students--were eligible to receive student aid from all four programs. The concept of "packaging" aid had arrived, a method designed to provide the individual student with a balanced mix of grants, subsidized loans, and subsidized part-time employment.

By 1969-70, a number of states had developed their own grant and subsidized loan programs. Total state aid to students that academic year was $ 200 million. In addition, there were numerous private scholarship programs available from corporations, trade unions, non-profit foundations, school alumni organizations, as well as directly from institutions of higher education. Private aid in 1969-70 was $ 870 million, more than means-tested programs at the Federal and state levels. However, Federal social security and veterans' benefits, which were not subject to financial means tests, totaled $ 1.6 billion in 1969-70. Counting all sources of aid--Federal, state, and private--a grand total of $ 4.1 billion in student aid was awarded in 1969-70. At the time, total full-time equivalent (FTE) enrollment in higher education stood at 6.3 million students. In other words, approximately $ 650 in aid was available per FTE student.

The 1970s gave rise to an explosive growth in means-tested Federal student aid. Major amendments to the Higher Education Act were passed by Congress in 1972, 1976, and 1978, and in each instance, new student aid programs were authorized or eligibility rules were liberalized. By 1980-81, the Federal government was spending $ 5.1 billion on HEA student aid programs, nearly a ten-fold increase from 1969-70. A total of $ 10.3 billion in Federally supported, means-tested student aid was awarded in 1980-81. State-supported student aid had grown more than fourfold since 1969-70, to a 1980-81 total of $ 801 million. Private aid had grown more slowly, but still had increased to $ 2.1 billion. Federal social security and veterans' educational benefits had more than doubled, to $ 3.6 billion. Total aid from all sources for 1980-81 was $ 16.9 billion, against an FTE enrollment of 8.8 million. Put in other terms, some $ 1920 in aid was available per FTE student, nearly triple the 1969-70 amount.

The most significant change from 1969-70 obviously was the fact that Federal student aid under the Higher Education Act programs had vastly outstripped aid from private sources. It was also clear by the start of the 1980s that Federal aid to students would prevail over state aid, despite significant increases in the latter. In short, the national government's role in indirectly supporting higher education through student aid funds had become clearly established.

From a programmatic standpoint, the most important change occurring in the 1970s was the enactment in 1972 of a broad-scaled national grant program for financially needy undergraduate students. Originally called the Basic Educational Opportunity Grant program (the old campus-based Educational Opportunity Grant program was renamed "Supplemental Educational Opportunity Grant" or SEOG), it was named the Pell Grant program in 1980, after U.S. Senator Claibourne Pell of Rhode Island. To avoid confusion, the program shall hereafter be referred to by its current name, Pell Grant.

Pell Grants are the closest the U.S. has ever come to providing national education vouchers. They are completely portable and may be used at public and private universities, as well as at qualifying proprietary schools. Eligibility is based on a national formula that takes into account the family income and assets of a student and his or her parents or spouse, set against the costs of attending a particular university. Two students of equal means, therefore, may differ in terms of Pell Grant eligibility simply because one chose a low-cost public institution while another chose to attend a higher-cost private college. Some balance is put into the equation by limiting the percentage of educational costs which may be met by Pell Grants (originally 50 percent of costs-of-attendance, but since 1986, 60 percent) and by limiting the maximum dollar amount of Pell Grant awards. In actual experience, students attending public colleges tend to "bump up" against the percentage limit, while those attending private colleges "max out" against the dollar amount limit.

Pell Grants have grown at a phenomenal pace. In 1973-74, the first year of funding, Congress appropriated $ 122 million, which in turn provided 176,000 awards. By 1980-81, the total amount appropriated was $ 2.2 billion, which provided 2.9 million awards. A large percentage of Pell Grant dollars, more than three-fourths of the total, were awarded to students whose family incomes fell below the official poverty line.

Another program that grew at a phenomenal rate in the 1970s was the Guaranteed Student Loan (GSL) program. In 1969-70, GSL subsidies of $ 75 million leveraged $ 811 million in private capital, which in turn was loaned to 863,000 students. By 1980-81, subsidy costs were up to $ 1.6 billion, which in turn leveraged $ 6.2 billion in loan capital to 2.9 million students. About one in every three FTE students was a GSL borrower by 1980-81.

Even a cursory look at these figures should suggest questions about the relationship between the Federal subsidy component and the total amount of capital leveraged. Why is it the case that the ratio between capital loaned out was more than 10-to-1 in 1969-70 but slightly less than 4-to-1 in 1980-81? The answer, while fairly simple, gives insight into one of the public policy questions that gained heightened attention in the 1980s. Basically, subsidy costs for GSLs are predominantly "back-loaded." That is, they occur primarily in the years <u>after</u> a GSL loan has been made to a student, <u>not</u> at the time of loan origination. The major subsidy components of a GSL are: 1) complete payment of interest charges while the student remains enrolled at least half-time in an institution of higher education and during periods of qualified deferment; 2) payment of a "special allowance" representing the difference between the borrower's low rate of interest and the lender's higher rate of yield on each

loan, payable throughout the loan repayment period, normally ten years; and 3) reinsurance for claims due to death, disability, or default, paid to state guarantee agencies, which act as first-line insurers for private banks.

As one can readily see, except for the interest subsidy paid during the same academic year in which a loan in taken out, all other subsidies incur costs during ensuing fiscal years. Over time, the "pile-up" of subsidy costs for many years worth of loans tends to reduce the leveraging ability of Federal dollars. Since GSLs are entitlement programs, available to all qualifying borrowers, Federal subsidy costs have risen virtually unabated.

One small program enacted in 1974 in worth mentioning, the State Student Incentive Grant (SSIG) program. The purpose of the SSIG program was to stimulate the creation and growth of state-funded grant programs as a supplement to Federal student aid. Each Federal dollar provided under SSIG was required to be matched, at minimum, by one state-funded dollar. While the Federal appropriations have been modest--$ 20 million in 1974-75 and a high of $ 76.8 million in 1980-81. Nevertheless, state grants nearly quadrupled during those same years, from $ 38 million to $ 154 million.

Growth of Federal student aid under the HEA programs was more modest during the first half of the 1980s. By this time, the Federal role in student aid had more or less risen to a natural peak, enrollment growth had slowed, and public sentiment had shifted toward more conservative views about government funding. In 1984-85, $ 6.2 billion was appropriated for means-tested student aid, an increase of $ 1.1 billion from 1980-81. These funds in turn leveraged $ 13.4 billion in aid for nine million FTE students. State student aid had grown by more than 50 percent in four years, to $ 1.2 billion. Private aid also grew by more than 50 percent, to $ 3.2 billion.

The sharpest declines were in social security and veterans' educational benefits. Social security outlays dropped from $ 1.9 billion in 1980-81 to only $ 35 million in 1984-85, reflecting the impact of 1981 legislation terminating these benefits for new recipients. Congress had been persuaded that year by arguments from the incoming Reagan Administration that extended entitlement benefits under the social security system were not necessary for financially needy students, since they would be covered by other forms of student aid. Non-needy students, it was argued, should not be entitled to scarce funds needed to pay pensions to the disabled and retired senior citizens. Veterans benefits dropped as well, from $ 1.7 billion in 1980-81 to $ 874 million in 1984-85. This reduction, however, was largely due to the fact that most Vietnam-era veterans had already exhausted their benefits by the mid-1980s or else had failed to utilize benefits before the eligibility period expired.

These declines in non means-tested aid, therefore, somewhat mask the changes in overall aid available to students. In current dollars, total aid from all sources in 1984-85 was $ 19 billion, compared to $ 16.9 billion in 1980-81. Total FTE enrollment was nine million in 1984-85, for an average of approximately $ 2100 in student aid available per FTE. In both current and constant dollars, growth occurred in means-tested Federal aid, state aid, and private aid, while a decline occurred in the social security and veterans educational benefits programs.

A major change affecting HEA student aid in the late 1970s and early 1980s was the passage of the Middle Income Student Assistance Act (MISAA) in 1978. MISAA broadened eligibility for Pell Grants by modifying the formula for determining eligibility, thus making thousands of middle income students eligible for small grant awards. This explains that fact that the number of Pell Grant recipients jumped from 1.9 million in 1978 to 2.8 million in 1984, despite the fact that funding only increased from $ 2.2 billion to $ 2.8 billion during the same period. MISAA also lifted completely the means test for GSL recipients. Previously, borrowers with family incomes above $ 25,000 per year were not eligible to receive GSLs. Without the means test, GSL loan volume skyrocketed, from $ 2.4 billion in 1978 to $ 7.2 billion in 1981. Stories of abuses abounded--well-to-do students who placed their student loan proceeds in investment accounts and actually made money off the taxpayers' generosity. In 1981, prompted by the Reagan Administration, Congress acted to curb these abuses by requiring a financial means test for borrowers whose family incomes exceeded $ 30,000.

More recently, Federal student aid programs have continued to experience change. In 1986, the U.S. Congress reauthorized student aid programs for a five-year period, through 1991. Major changes made as a result of the 1986 reauthorization include:

-- an imposition of means-testing for all GSL borrowers;
-- expanded eligibility for borrowing under the non-subsidized Supplemental Loan for Students (SLS) program, an outgrowth of 1980 legislative amendments;
-- phased-in increased institutional matching requirements for campus-based program funds;
-- new definitions for "independent" students;
-- eventual eligibility for Pell Grants for less-than-half-time students, a nod at the "re-entry" non-traditional student;
-- a limited demonstration program for "income contingent" loans.

Although a number of higher education associations testified in favor of various major increases in student aid, the majority of Congressional committee members argued for the more modest ap-

proach embodied in the final reauthorization bill, voicing concern about the Federal budget deficit and the need to control the urge to spend.

Subsequent to the 1986 reauthorization, there has been concern over the rising annual costs associated with student loan defaults. Total Federal default payments for 1987-88 are expected to be some $ 1.6 billion, more than half the annual subsidy costs for the program. Senate hearings were conducted in late 1987, and the chairman of the House of Representatives subcommittee on postsecondary education sponsored a special retreat of higher education experts during the winter of 1987-88 to explore creative solutions to the default problem. In general, political liberals feel that many students have been forced to borrow because grant award maximums have not kept pace with increases in the price of higher education and that defaults have increased accordingly. Conservatives point out that most defaults occur on the part of dropouts from postsecondary institutions, and they consequently raise questions about the admissions practices of some institutions, in particular the proprietary schools, about which it is alleged that widespread abuses occur in the recruitment of patently unqualified students. This issue is bound to gather more interest, not only because it involves significant sums of money, sums which both camps would like to see put to better use, but also because both the liberal and conservative positions seem to be scoring points with a broad spectrum of members of Congress.

IV. RECENT CHANGES IN ORGANIZATION AND MISSION

As in many nations within OECD, dramatic shifts occurred in the demographics of the higher education clientele as well as within the world of work during the past few decades. With all this flux, there were bound to be consequences within the administration and financing of postsecondary education. We are still a bit too close to a number of these shifts to see the consequences clearly. Indeed, some of them are still evolving. Nevertheless, the confluence of a number of factors impinging upon the U.S. is dramatically altering postsecondary education. These factors, albeit interrelated, will be discussed one by one.

Less than two decades ago, the human resource pool was referred to as "boundless." Many of our Federal and State programs for postsecondary education were aimed at facilitating access to higher education for all eligible students. The assumption, accepted without question, was that those gaining access would persist in a program of education and would become successfully prepared and ready to enter the economic mainstream as tax paying citizens. It was further assumed that these individuals, having progressed through elementary and secondary school, could rise to the rigor of college work through remediation, even if not adequately prepared at the onset. The Federal government as well as private organizations and the professoriate invested considerable energies in remedial education. Part of their motivation came from a social policy orientation and another part came from a genuine belief that educationally disadvantaged students could quickly compensate for their deficits and succeed in higher education. In retrospect, that drive to accelerate education for those who had oftentimes been socially promoted through elementary and secondary grades before developing appropriate skills has compounded the challenge to U.S. higher education.

Fifteen years ago, there were more than enough students to go around. Postsecondary institutions could be as selective as they wished without risking a reduction in enrollment. Today, as mentioned in Chapter 1, the tables have been turned. It is a buyer's market. Colleges and universities are actively marketing and assiduously recruiting students. It is estimated that the average marketing cost for each successfully enrolled freshman student for the fall of 1988-89 is approximately $ 800, with one mid-size university reaching $ 2,700 per recruit.

Coupled with this dwindling pool of traditional students (ages 18 to 24 years), is the sobering reality that a significantly larger proportion of those students graduating from

high school are considered at-risk, in that they do not have a sufficient level of competencies to enter postsecondary education, particularly traditional higher education, or the job market.

At the same time these shifts in the student clientele are occurring, the job requirements of entry-level positions in the world of work are increasing. They are increasing to the point where a larger percentage of students need postsecondary level education to be competitive in the labor force. It is the confluence of these factors that has stimulated the creation of financial assistance programs to students. However, a focus solely upon access for a larger number of individuals has not been sufficient to meet these demographic and economic realities.

The U.S. Congress has actually inserted language in student aid program legislation which gives individuals who lack the high school diploma or its equivalent the right to receive student aid if they are deemed by postsecondary institutions to have the "ability to benefit" from the education or training provided. As one might expect, many citizens were helped by this policy. However, a large number of those who had not previously successfully completed secondary schooling could not persist in their postsecondary programs and dropped out, sometimes with high student loan bills to pay. The Reagan Administration, accordingly, has made "ability to benefit" reform a priority, focusing not merely on access to postsecondary education but also on successful completion.

Accountability is another major issue of the day. By enrolling students for a fee, institutions are implicitly contracting to deliver educational services, services from which it is expected the student can benefit. Increasingly, the Federal government as well as the states are requesting that institutions obtain and build upon information about success rates of students within postsecondary education, along with success in job placement once graduation or certification has taken place.

In another vein, there have been some significant shifts in the management and administration of higher education institutions. Administrative expenditures have been taking an increasingly larger proportion of institutional revenue. Over the long haul, the instructional costs proportion of the total budget in institutions of higher education has dropped from nearly 60 per cent in 1929-30 to just under 50 per cent in 1984-85. At the same time, administrative costs have increased from one dollar out of nine spent (11 per cent of the total) to one dollar out of five (19 per cent of the total). Looking at it another way, we find the number of course contact hours per full-time instructor has been dropping. For example, the average teaching load in one major state university system has dropped by more than 17 per

cent in the five-year period from 1980 to 1985. These shifts have reduced productivity in the labor-intensive enterprise of higher education.

Both challenges, accountability for the delivery of educational services and productivity in accomplishing that delivery are being fervently discussed within and beyond the higher education community. Increasingly, the corporate sector is beginning to infuse both ideas and resources into postsecondary education and training. Many corporations, not fully satisfied with the quality of postsecondary education and training, have set up major, internal education and training programs. Today, the corporate sector in the U.S. supplies as many course contact hours as does all of higher education! This relatively recent phenomenon has arisen from the desire to design educational programs that can be meshed with the work schedule and from corporate insistence that those who receive training become fully competent.

For the long run, the U.S. corporate sector will likely continue to complement traditional postsecondary education in developing human resource capital. The corporate sector, perhaps even more than academe, is keenly aware of the fact that the only way for the country to thrive in the international economic arena is to invest significant resources in competency-based education and training for all segments of the population. David T. Kearns, Chairman and CEO of Xerox, in a book co-authored with Denis P. Doyle, **Winning the Brain Race** (1988), emphatically calls for a restructuring of all levels of education in order to insure economic prosperity for citizens, individually and collectively. In this book, the corporate sector is challenged to immerse itself in the restructuring as change agents.

This infusion of corporate thinking will likely affect both accountability and productivity. Colleges and universities will, in all probability, become more administratively sophisticated, with a leaner cadre of full-time administrators in relation to instructional staff. Faculty will also be challenged to become more productive. Institutionalized inertia is a barrier that will likely be overcome, since the economic realities of the 21st century will be the driving force behind these administrative and financial shifts.

Finally, given the rate of technological change within the world, education and training will become lifelong enterprises. Many skill requirements developed in the 1980s will be updated and replaced with new and often more complex skill requirements for entry and re-entry into the world of work. Postsecondary education institutions will need to constantly hone their education and training programs to adapt to these changes. The cost of making such bold adaptations will be of major consequence for postsecondary institutions.

V. FORECASTING THE NEAR FUTURE

It is highly unlikely that the basic mechanisms for financing higher education in the United States will change significantly between now and the turn of the century. The heterogeneous mix of funding from Federal, state, and private sources has "matured" in some ways since 1969-70, but those changes that have occurred have scarcely reflected a radical departure from the general approach to higher education financing in place some 18 years ago. The United States is not about to nationalize its universities, nor is it planning to abandon its traditional commitment to public institutions of higher education.

As we have seen in Chapter Three, Federal financing policies have shifted most dramatically in the area of student financial aid. Without oversimplifying, it is safe to describe the Federal financing role in 1969-70 as one stressing direct support for research and facilities construction, while including a moderate amount of means-tested student aid and a significant amount of educational entitlement benefits for veterans and social security dependents. By the mid-1980s, the mix of Federal support has shifted dramatically. The emphasis at present is on means-tested student aid. Social security benefits have been largely eliminated. Veterans benefits have dropped dramatically, although with recent enactment of the Montgomery G.I. Bill, they should be increasing steeply in the next few years. Basic research continues to receive comfortable support, while Federal support for facilities construction has dwindled.

The 1988 Presidential election will likely be the key to any changes in Federal higher education policy. Vice-President George Bush, the likely Republican nominee, has stated his desire to become the "education President," while Massachusetts Governor Michael Dukakis, the probable Democratic nominee, has stressed his strong support for higher education at the state level. No matter which candidate wins, there will probably be new Federal initiatives in higher education, though set against the backdrop of the Federal deficit, such initiatives are more likely to be modest and reform-oriented, not the expansionist Great Society programs of the Lyndon Johnson era.

In the student aid area, grants will probably be increased. Already, in its waning months, the Reagan Administration has requested an increase in the maximum Pell Grant award for fiscal year 1989. A $ 3,000 maximum Pell Grant is not unlikely by the time of the 1991 reauthorization of the Higher Education Act.

On the other hand, Congress will probably lower subsidy costs for Guaranteed Student Loans, partly as a trade-off for grant increases. Banks may be asked to share up to ten percent of the risks from loan defaults, and long-term interest subsidies to borrowers will probably be reduced to a period no longer than four years after graduation.

One topic just emerging in the debate on student aid is the suggestion that incentives be built into student aid "packaging" for students who continue to make academic progress. Thus a person who has reached the senior year of university studies may be given an incentive--perhaps a higher ratio of grant aid to loans--than a beginning freshman. Other public policy analysts have suggested that beginning students primarily receive grants instead of loans. Advocates of this approach believe that defaults on loans will occur less frequently if loans are made only to advanced undergraduates, who have had a chance to prove that they may be successful in pursuit of postsecondary education or training. While achievement incentives or a frontloading of grants are policy proposals that may not be enacted soon, they are likely to be part of the discussion during the 1991 reauthorization.

It is also possible that some minor changes may be made in the Federal tax code. The tax credit for employer-paid tuition may well be restored, since it has considerable support from both education and business lobbies. The taxation of graduate fellowships may also be eliminated.

On the state level, the growth in spending may slow down, due to limits in available tax revenue. The emphasis at the state level will be on accountability, hard data to support institutional requests for funds. Improved student achievement will be demanded by state legislators, and if their expectations are not fulfilled, money will not continue to flow. An already-established trend toward increased regulation at the state government level may continue, with the short-term effect of worsening relations between state officials and institutions of higher education. Ironically, while the Federal government in general has refrained from proceeding too far in prescriptively regulating higher education, the states may enter the vacuum and err on the side of micro-management. New Jersey Governor Thomas Kean has warned of this possibility in recent articles, and Frank Newman, President of the Education Commission of the States, has just published a book encouraging higher education administrators to develop better relations with their state governments or face the consequences of estrangement.

Demographics will continue to influence policies in higher education, including financing policies. As mentioned in Chapter One, the current population of traditional 18-24 year-old college students is at a low point, following the maturation of the

post-World War II "Baby Boomers." But by the early 1990s, the children of the Baby Boomers will be reaching college age, creating a "Baby Boomlet" that will once again trigger enrollment increases. The scenario is complicated by the fact that a greater proportion of these postsecondary students of the 1990s will be from minority groups and thus are more likely to have received less enriching secondary educations. Add to this the fact that the average age of tenured professors in U.S. institutions is at an all-time high, signaling massive retirements in the not-too-distant future, and one begins to envision a demographer's night-mare, a spike of students intersecting with a trough of professors. How demographics will affect supply and demand of both students and professors is a question that will be on everyone's mind in the near future.

All in all, as it has done throughout most of the U.S.A.'s history, the real changes and the real solutions to many of these problems will probably occur on the individual campus. We have already seen how campuses have responded to uncertainties in government financing; from 1969-70 to 1984-85, revenues from private gifts, grants, and contracts; endowment income; and sales and services grew from 23.5 percent of institutional receipts to 28.9 percent. There is nothing to suggest that this trend toward a quasi-business mode of operation for U.S. colleges and universities will diminish. Fundraising and marketing have become major components of U.S. institutions of higher education, including public institutions, the majority of which now have affiliated foundations to receive private support.

STATISTICAL APPENDIX

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All Institutions	Current-Fund Expenditures		Full-Time Equivalent Enrollment	Expenditures Per FTE In Current Dollars	Expenditures Per FTE In Constant 1980 Dollars
	Current Dollars	Constant 1980 Dollars			
1969-70.....	$21,043,110,000	$47,287,888,000	6,283,658	$3,349	$7,526
1980-81.....	$64,052,938,000	$64,052,938,000	8,819,013	$7,263	$7,263
1984-85.....	$89,951,263,000	$72,192,025,000	8,951,695	$10,049	$8,065
Public Institutions					
1969-70.....	$13,249,546,000	$29,774,261,000	4,555,652	$2,908	$6,536
1980-81.....	$42,279,806,000	$42,279,806,000	6,642,294	$6,365	$6,365
1984-85.....	$58,314,550,000	$46,801,404,000	6,684,664	$8,724	$7,001
Private Institutions					
1969-70.....	$7,793,567,000	$17,513,634,000	1,728,006	$4,510	$10,135
1980-81.....	$21,773,132,000	$21,773,132,000	2,176,719	$10,003	$10,003
1984-85.....	$31,636,713,000	$25,390,620,000	2,267,031	$13,955	$11,200

Notes:
1. FTE for 1969-70 is estimated based on total enrollment.

Source: Digest of Education Statistics, 1987, U.S. Department of Education

FEDERAL OBLIGATIONS TO UNIVERSITIES AND COLLEGES BY AGENCY

($'s in millions)	1969-70		1980-81		1984-85	
Federal Agency	CURRENT DOLLARS	CONSTANT 1980 DOLLARS	CURRENT DOLLARS	CONSTANT 1980 DOLLARS	CURRENT DOLLARS	CONSTANT 1980 DOLLARS
USDA	155.9	350.3	448.4	448.4	611.6	490.9
COM	3.9	8.8	51.9	51.9	105.2	84.4
DOD	278.7	626.3	555.9	555.9	1,047.4	840.6
OEO	60.4	135.7	---	---	---	---
ED	---	---	2,832.1	2,832.1	3,517.1	2,822.7
DOE	121.0	271.9	312.2	312.2	354.6	284.6
EPA	---	---	83.1	83.1	52.9	42.5
HHS	2,302.4	5,173.9	2,985.8	2,985.8	3,148.4	2,526.8
HUD	1.1	2.5	4.3	4.3	0.4	0.3
INT	24.3	54.6	45.8	45.8	45.7	36.7
AID	10.0	22.5	38.6	38.6	56.3	45.2
LABOR	10.4	23.4	16.2	16.2	7.1	5.7
NASA	127.2	285.8	171.2	171.2	216.6	173.8
NSF	367.0	824.7	726.3	726.3	935.5	750.8
NRC	---	---	7.0	7.0	4.9	3.9
DOT	---	---	19.4	19.4	14.8	11.9
TOTAL	3,462.3	7,780.4	8,298.2	8,298.2	10,118.5	8,120.8
Inflation Index		0.445		1.000		1.246

Source: Federal Support to Universities, Colleges, and Selected Nonprofit Institutions: FY 1985

KEY TO FEDERAL AGENCIES

AID	--	Agency for Intl. Development
COM	--	Dept. of Commerce
DOD	--	Dept. of Defense
DOE	--	Dept. of Energy
DOT	--	Dept. of Transportation
ED	--	Dept. of Education
EPA	--	Environmental Protection Agency
HHS	--	Dept. of Health & Human Services
HUD	--	Dept. of Housing & Urban Development
INT	--	Dept. of Interior
LABOR	--	Dept. of Labor
NASA	--	Ntl. Aeronautics & Space Administration
NRC	--	Nuclear Regulatory Comm.
NSF	--	Ntl. Science Foundation
OEO	--	Office of Economic Opportunity (defunct)
USDA	--	Dept. of Agriculture

Current-Fund Revenue of Institutions of Higher Education: By Source

In Current Dollars

(Dollars in Thousands)

	1969-70					
	Total		Public		Private	
	Amount	Percent	Amount	Percent	Amount	Percent
Total Current Fund Revenue	$21,515,243	100.0%	$13,768,624	100.0%	$7,746,618	100.0%
Tuition and Fees from Students	5,077,861	23.6%	2,084,091	15.1%	2,993,770	38.6%
Federal Government	3,450,882	16.0%	2,012,869	14.6%	1,438,412	18.6%
Appropriations	511,315	2.4%	417,459	3.0%	93,856	1.2%
Unrestricted Grants and Contracts	---	---	---	---	---	---
Restricted Grants and Contracts 1/	---	---	---	---	---	---
Independent Operations 2/	768,498	3.6%	321,048	2.3%	447,450	5.8%
State Governments	5,787,910	26.9%	5,684,545	41.3%	103,365	1.3%
Appropriations	5,617,849	26.1%	5,532,090	40.2%	85,759	1.1%
Unrestricted Grants and Contracts	---	---	---	---	---	---
Restricted Grants and Contracts	---	---	---	---	---	---
Local Governments	774,803	3.6%	714,766	5.2%	60,036	0.8%
Appropriations	722,063	3.4%	699,831	5.1%	22,231	0.3%
Unrestricted Grants and Contracts	---	---	---	---	---	---
Restricted Grants and Contracts	---	---	---	---	---	---
Private Gifts, Grants, and Contracts	1,001,453	4.7%	262,485	1.9%	738,969	9.5%
Unrestricted	616,212	2.9%	58,234	0.4%	557,979	7.2%
Restricted	385,241	1.8%	204,251	1.5%	180,990	2.3%
Endowment Income	447,275	2.1%	57,080	0.4%	390,195	5.0%
Unrestricted	---	---	---	---	---	---
Restricted	---	---	---	---	---	---
Sales and Services	3,602,552	16.7%	2,164,890	15.7%	1,437,661	18.6%
Educational Activities	82,584	0.4%	69,046	0.5%	13,537	0.2%
Auxiliary Services	2,900,390	13.5%	1,727,526	12.5%	1,172,864	15.1%
Hospitals	619,578	2.9%	368,318	2.7%	251,260	3.2%
Other Sources	1,372,507	6.4%	787,898	5.7%	584,210	7.5%

1/ Excludes aid received from the Pell Grant program. Other Federally supported student aid that is received through students is included under tuition and auxiliary enterprises.

2/ Includes only those revenues associated with major Federally funded research and development centers.

In Current Dollars

1980-81

(Dollars in Thousands)

	Total		Public		Private	
	Amount	Percent	Amount	Percent	Amount	Percent
Total Current Fund Revenue	$65,584,789	100.0%	$43,195,617	100.0%	$22,389,172	100.0%
Tuition and Fees from Students	13,773,259	21.0%	5,570,404	12.9%	8,202,855	36.6%
Federal Government	9,747,586	14.9%	5,540,101	12.8%	4,207,485	18.8%
Appropriations	1,346,835	2.1%	1,128,101	2.6%	218,733	1.0%
Unrestricted Grants and Contracts	1,126,558	1.7%	529,424	1.2%	597,134	2.7%
Restricted Grants and Contracts 1/	6,005,317	9.2%	3,812,197	8.8%	2,193,119	9.8%
Independent Operations 2/	1,268,877	1.9%	70,379	0.2%	1,198,498	5.4%
State Governments	20,106,222	30.7%	19,675,968	45.6%	430,253	1.9%
Appropriations	19,266,186	29.4%	19,006,716	44.0%	259,470	1.2%
Unrestricted Grants and Contracts	84,848	0.1%	45,390	0.1%	39,458	0.2%
Restricted Grants and Contracts	755,188	1.2%	623,863	1.4%	131,326	0.6%
Local Governments	1,790,740	2.7%	1,622,938	3.8%	167,801	0.7%
Appropriations	1,482,536	2.3%	1,478,001	3.4%	4,535	0.0%
Unrestricted Grants and Contracts	29,629	0.0%	9,915	0.0%	19,714	0.1%
Restricted Grants and Contracts	278,575	0.4%	135,022	0.3%	143,552	0.6%
Private Gifts, Grants, and Contracts	3,176,670	4.8%	1,100,084	2.5%	2,076,585	9.3%
Unrestricted	1,210,903	1.8%	110,462	0.3%	1,100,441	4.9%
Restricted	1,965,766	3.0%	989,622	2.3%	976,144	4.4%
Endowment Income	1,364,443	2.1%	214,561	0.5%	1,149,883	5.1%
Unrestricted	770,358	1.2%	102,888	0.2%	667,471	3.0%
Restricted	594,085	0.9%	111,673	0.3%	482,412	2.2%
Sales and Services	13,677,366	20.9%	8,455,449	19.6%	5,221,917	23.3%
Educational Activities	1,409,730	2.1%	943,737	2.2%	465,993	2.1%
Auxiliary Services	7,287,290	11.1%	4,614,561	10.7%	2,672,729	11.9%
Hospitals	4,980,346	7.6%	2,897,151	6.7%	2,083,195	9.3%
Other Sources	1,948,503	3.0%	1,016,110	2.4%	932,392	4.2%

In Current Dollars

(Dollars in Thousands)	1984-85					
	Total		Public		Private	
	Amount	Percent	Amount	Percent	Amount	Percent
Total Current Fund Revenue	$92,472,694	100.0%	$59,794,159	100.0%	$32,678,536	100.0%
Tuition and Fees from Students	21,283,329	23.0%	8,647,637	14.5%	12,635,691	38.7%
Federal Government	11,509,125	12.4%	6,309,818	10.6%	5,199,307	15.9%
Appropriations	1,570,590	1.7%	1,349,183	2.3%	221,407	0.7%
Unrestricted Grants and Contracts	1,474,586	1.6%	723,509	1.2%	751,076	2.3%
Restricted Grants and Contracts 1/	6,570,045	7.1%	4,120,266	6.9%	2,449,780	7.5%
Independent Operations 2/	1,893,904	2.0%	116,860	0.2%	1,777,044	5.4%
State Governments	27,583,011	29.8%	26,965,417	45.1%	617,593	1.9%
Appropriations	26,373,160	28.5%	26,065,494	43.6%	307,666	0.9%
Unrestricted Grants and Contracts	135,139	0.1%	71,113	0.1%	64,026	0.2%
Restricted Grants and Contracts	1,074,712	1.2%	828,810	1.4%	245,902	0.8%
Local Governments	2,387,212	2.6%	2,178,761	3.6%	208,451	0.6%
Appropriations	1,973,284	2.1%	1,970,829	3.3%	2,455	0.0%
Unrestricted Grants and Contracts	63,442	0.1%	35,398	0.1%	28,045	0.1%
Restricted Grants and Contracts	350,485	0.4%	172,534	0.3%	177,951	0.5%
Private Gifts, Grants, and Contracts	4,896,325	5.3%	1,845,606	3.1%	3,050,719	9.3%
Unrestricted	1,944,876	2.1%	236,385	0.4%	1,708,491	5.2%
Restricted	2,951,448	3.2%	1,609,220	2.7%	1,342,228	4.1%
Endowment Income	2,096,298	2.3%	342,833	0.6%	1,753,465	5.4%
Unrestricted	1,227,797	1.3%	147,237	0.2%	1,080,560	3.3%
Restricted	868,501	0.9%	195,596	0.3%	672,905	2.1%
Sales and Services	19,701,912	21.3%	11,967,500	20.0%	7,734,412	23.7%
Educational Activities	2,126,927	2.3%	1,424,896	2.4%	702,032	2.1%
Auxiliary Services	10,100,410	10.9%	6,296,312	10.5%	3,804,098	11.6%
Hospitals	7,474,575	8.1%	4,246,293	7.1%	3,228,282	9.9%
Other Sources	3,015,483	3.3%	1,536,586	2.6%	1,478,897	4.5%

Current-Fund Revenue of Institutions of Higher Education: By Source

In Constant 1980 Dollars

(Dollars in Thousands)

	1969-70					
	Total		Public		Private	
	Amount	Percent	Amount	Percent	Amount	Percent
Total Current Fund Revenue	48,348,861	100.0%	30,940,728	100.0%	17,408,130	100.0%
Tuition and Fees from Students	11,410,924	23.6%	4,683,351	15.1%	6,727,573	38.6%
Federal Government	7,754,791	16.0%	4,523,301	14.6%	3,232,387	18.6%
Appropriations	1,149,022	2.4%	938,110	3.0%	210,912	1.2%
Unrestricted Grants and Contracts	---	---	---	---	---	---
Restricted Grants and Contracts 1/	---	---	---	---	---	---
Independent Operations 2/	1,726,962	3.6%	721,456	2.3%	1,005,506	5.8%
State Governments	13,006,539	26.9%	12,774,258	41.3%	232,281	1.3%
Appropriations	12,624,380	26.1%	12,431,663	40.2%	192,717	1.1%
Unrestricted Grants and Contracts	---	---	---	---	---	---
Restricted Grants and Contracts	---	---	---	---	---	---
Local Governments	1,741,130	3.6%	1,606,216	5.2%	134,912	0.8%
Appropriations	1,622,613	3.4%	1,572,654	5.1%	49,957	0.3%
Unrestricted Grants and Contracts	---	---	---	---	---	---
Restricted Grants and Contracts	---	---	---	---	---	---
Private Gifts, Grants, and Contracts	2,250,456	4.7%	589,854	1.9%	1,660,604	9.5%
Unrestricted	1,384,746	2.9%	130,863	0.4%	1,253,885	7.2%
Restricted	865,710	1.8%	458,991	1.5%	406,719	2.3%
Endowment Income	1,005,112	2.1%	128,270	0.4%	876,843	5.0%
Unrestricted	---	---	---	---	---	---
Restricted	---	---	---	---	---	---
Sales and Services	8,095,622	16.7%	4,864,921	15.7%	3,230,699	18.6%
Educational Activities	185,582	0.4%	155,160	0.5%	30,420	0.2%
Auxiliary Services	6,517,730	13.5%	3,882,981	12.5%	2,635,649	15.1%
Hospitals	1,392,310	2.9%	827,681	2.7%	564,629	3.2%
Other Sources	3,084,285	6.4%	1,770,557	5.7%	1,312,831	7.5%
Inflation Index	0.445		0.445		0.445	

1/ Excludes aid received from the Pell Grant program. Other Federally supported student aid that is received through students is included under tuition and auxiliary enterprises.

2/ Generally includes only those revenues associated with major Federally funded research and development

(Dollars in Thousands)	Total		Public		Private	
	Amount	Percent	Amount	Percent	Amount	Percent
Total Current Fund Revenue	$65,584,789	100.0%	$43,195,617	100.0%	$22,389,172	100.0%
Tuition and Fees from Students	13,773,259	21.0%	5,570,404	12.9%	8,202,855	36.6%
Federal Government	9,747,586	14.9%	5,540,101	12.8%	4,207,485	18.8%
Appropriations	1,346,835	2.1%	1,128,101	2.6%	218,733	1.0%
Unrestricted Grants and Contracts	1,126,558	1.7%	529,424	1.2%	597,134	2.7%
Restricted Grants and Contracts 1/	6,005,317	9.2%	3,812,197	8.8%	2,193,119	9.8%
Independent Operations 2/	1,268,877	1.9%	70,379	0.2%	1,198,498	5.4%
State Governments	20,106,222	30.7%	19,675,968	45.6%	430,253	1.9%
Appropriations	19,266,186	29.4%	19,006,716	44.0%	259,470	1.2%
Unrestricted Grants and Contracts	84,848	0.1%	45,390	0.1%	39,458	0.2%
Restricted Grants and Contracts	755,188	1.2%	623,863	1.4%	131,326	0.6%
Local Governments	1,790,740	2.7%	1,622,938	3.8%	167,801	0.7%
Appropriations	1,482,536	2.3%	1,478,001	3.4%	4,535	0.0%
Unrestricted Grants and Contracts	29,629	0.0%	9,915	0.0%	19,714	0.1%
Restricted Grants and Contracts	278,575	0.4%	135,022	0.3%	143,552	0.6%
Private Gifts, Grants, and Contracts	3,176,670	4.8%	1,100,084	2.5%	2,076,585	9.3%
Unrestricted	1,210,903	1.8%	110,462	0.3%	1,100,441	4.9%
Restricted	1,965,766	3.0%	989,622	2.3%	976,144	4.4%
Endowment Income	1,364,443	2.1%	214,561	0.5%	1,149,883	5.1%
Unrestricted	770,358	1.2%	102,888	0.2%	667,471	3.0%
Restricted	594,085	0.9%	111,673	0.3%	482,412	2.2%
Sales and Services	13,677,366	20.9%	8,455,449	19.6%	5,221,917	23.3%
Educational Activities	1,409,730	2.1%	943,737	2.2%	465,993	2.1%
Auxiliary Services	7,287,290	11.1%	4,614,561	10.7%	2,672,729	11.9%
Hospitals	4,980,346	7.6%	2,897,151	6.7%	2,083,195	9.3%
Other Sources	1,948,503	3.0%	1,016,110	2.4%	932,392	4.2%
Inflation Index	1.000		1.000		1.000	

In Constant 1980 Dollars

1984-85

(Dollars in Thousands)	Total		Public		Private	
	Amount	Percent	Amount	Percent	Amount	Percent
Total Current Fund Revenue	$74,215,645	100.0%	$47,988,892	100.0%	$26,226,754	100.0%
Tuition and Fees from Students	$17,081,323	23.0%	$6,940,319	14.5%	$10,141,004	38.7%
Federal Government	$9,236,858	12.4%	$5,064,059	10.6%	$4,172,799	15.9%
Appropriations	$1,260,506	1.7%	$1,082,811	2.3%	$177,694	0.7%
Unrestricted Grants and Contracts	$1,183,456	1.6%	$580,665	1.2%	$602,790	2.3%
Restricted Grants and Contracts 1/	$5,272,909	7.1%	$3,306,795	6.9%	$1,966,116	7.5%
Independent Operations 2/	$1,519,987	2.0%	$93,788	0.2%	$1,426,199	5.4%
	$0		$0		$0	
State Governments	$22,137,248	29.8%	$21,641,587	45.1%	$495,661	1.9%
Appropriations	$21,166,260	28.5%	$20,919,337	43.6%	$246,923	0.9%
Unrestricted Grants and Contracts	$108,458	0.1%	$57,073	0.1%	$51,385	0.2%
Restricted Grants and Contracts	$862,530	1.2%	$665,177	1.4%	$197,353	0.8%
	$0		$0		$0	
Local Governments	$1,915,900	2.6%	$1,748,604	3.6%	$167,296	0.6%
Appropriations	$1,583,695	2.1%	$1,581,725	3.3%	$1,970	0.0%
Unrestricted Grants and Contracts	$50,917	0.1%	$28,409	0.1%	$22,508	0.1%
Restricted Grants and Contracts	$281,288	0.4%	$138,470	0.3%	$142,818	0.5%
	$0		$0		$0	
Private Gifts, Grants, and Contracts	$3,929,635	5.3%	$1,481,225	3.1%	$2,448,410	9.3%
Unrestricted	$1,560,896	2.1%	$189,715	0.4%	$1,371,181	5.2%
Restricted	$2,368,738	3.2%	$1,291,509	2.7%	$1,077,230	4.1%
	$0		$0		$0	
Endowment Income	$1,682,422	2.3%	$275,147	0.6%	$1,407,275	5.4%
Unrestricted	$985,391	1.3%	$118,168	0.2%	$867,223	3.3%
Restricted	$697,031	0.9%	$156,979	0.3%	$540,052	2.1%
	$0		$0		$0	
Sales and Services	$15,812,128	21.3%	$9,604,735	20.0%	$6,207,393	23.7%
Educational Activities	$1,707,004	2.3%	$1,143,576	2.4%	$563,429	2.1%
Auxiliary Services	$8,106,268	10.9%	$5,053,220	10.5%	$3,053,048	11.6%
Hospitals	$5,998,856	8.1%	$3,407,940	7.1%	$2,590,917	9.9%
	$0		$0		$0	
Other Sources	$2,420,131	3.3%	$1,233,215	2.6%	$1,186,916	4.5%
Inflation Index	1.246		1.246		1.246	

Current-Fund Expenditures of Institutions of Higher Education: By Purpose

In Current Dollars

(Dollars in Thousands)

	1969-70					
	Total		Public		Private	
	Amount	Percent	Amount	Percent	Amount	Percent
Total Current Fund Expenditures	$21,043,110	100.0%	$13,249,546	100.0%	$7,793,567	100.0%
Educational and General Expenditures	$16,773,291	79.7%	$10,831,168	81.7%	$5,942,126	76.2%
Instruction	$6,883,844	32.7%	$4,731,644	35.7%	$2,152,203	27.6%
Research	$2,144,076	10.2%	$1,271,135	9.6%	$872,941	11.2%
Public Service	$521,148	2.5%	$476,079	3.6%	$45,069	0.6%
Academic Support	---	---	---	---	---	---
Libraries	$652,596	3.1%	$414,975	3.1%	$237,621	3.0%
Student Services	---	---	---	---	---	---
Institutional Support	---	---	---	---	---	---
Operation and Maintenance of Plant	$1,541,698	7.3%	$1,000,095	7.5%	$541,603	6.9%
Scholarships and Fellowships	$984,594	4.7%	$456,977	3.4%	$527,617	6.8%
From Unrestricted Funds	---	---	---	---	---	---
From Restricted Funds 1/	---	---	---	---	---	---
Mandatory Transfers	---	---	---	---	---	---
Other	$4,045,335	19.2%	$2,480,263	18.7%	$1,565,072	20.1%
Auxiliary Enterprises	$2,769,276	13.2%	$1,624,398	12.3%	$1,144,878	14.7%
Mandatory Transfers	---	---	---	---	---	---
Hospitals	$671,236	3.2%	$415,082	3.1%	$256,154	3.3%
Mandatory Transfers	---	---	---	---	---	---
Independent Operations 2/	$757,388	3.6%	$320,351	2.4%	$437,037	5.6%
Mandatory Transfers	---	---	---	---	---	---
Other	$71,919	0.3%	$58,547	0.4%	$13,372	0.2%

1/ Excludes aid received from the Pell Grant program.

2/ Generally includes only those expenditures associated with major Federally funded research and development centers.

In Current Dollars

(Dollars in Thousands)

	1980-81					
	Total		Public		Private	
	Amount	Percent	Amount	Percent	Amount	Percent
Total Current Fund Expenditures	$64,052,938	100.0%	$42,279,806	100.0%	$21,773,132	100.0%
Educational and General Expenditures	$50,073,805	78.2%	$34,173,013	80.8%	$15,900,792	73.0%
Instruction	$20,733,166	32.4%	$14,849,822	35.1%	$5,883,343	27.0%
Research	$5,657,719	8.8%	$3,813,350	9.0%	$1,844,369	8.5%
Public Service	$2,057,770	3.2%	$1,718,924	4.1%	$338,845	1.6%
Academic Support	$4,273,286	6.7%	$3,029,284	7.2%	$1,244,002	5.7%
Libraries	$1,759,784	2.7%	$1,187,116	2.8%	$572,667	2.6%
Student Services	$2,908,998	4.5%	$1,950,566	4.6%	$958,432	4.4%
Institutional Support	$5,772,515	9.0%	$3,563,194	8.4%	$2,209,321	10.1%
Operation and Maintenance of Plant	$5,350,310	8.4%	$3,681,921	8.7%	$1,668,389	7.7%
Scholarships and Fellowships	$2,504,525	3.9%	$1,064,864	2.5%	$1,439,661	6.6%
From Unrestricted Funds	$1,080,614	1.7%	$367,476	0.9%	$713,138	3.3%
From Restricted Funds 1/	$1,423,911	2.2%	$697,388	1.6%	$726,523	3.3%
Mandatory Transfers	$815,516	1.3%	$501,087	1.2%	$314,429	1.4%
Other	---	---	---	---	---	---
Auxiliary Enterprises	$7,288,089	11.4%	$4,658,140	11.0%	$2,629,948	12.1%
Mandatory Transfers	$508,377	0.8%	$344,043	0.8%	$164,335	0.8%
Hospitals	$5,433,111	8.5%	$3,377,972	8.0%	$2,055,139	9.4%
Mandatory Transfers	$57,963	0.1%	$26,613	0.1%	$31,349	0.1%
Independent Operations 2/	$1,257,934	2.0%	$70,681	0.2%	$1,187,253	5.5%
Mandatory Transfers	$643	0.0%	$322	0.0%	$321	0.0%
Other	---	---	---	---	---	---

In Current Dollars

(Dollars in Thousands)

	1984-85					
	Total		Public		Private	
	Amount	Percent	Amount	Percent	Amount	Percent
Total Current Fund Expenditures	$89,951,263	100.0%	$58,314,550	100.0%	$31,636,713	100.0%
Educational and General Expenditures	$70,061,324	77.9%	$46,873,546	80.4%	$23,187,778	73.3%
Instruction	$28,777,183	32.0%	$20,287,410	34.8%	$8,489,773	26.8%
Research	$7,551,892	8.4%	$5,119,191	8.8%	$2,432,701	7.7%
Public Service	$2,861,095	3.2%	$2,316,270	4.0%	$544,825	1.7%
Academic Support	$6,074,253	6.8%	$4,267,698	7.3%	$1,806,555	5.7%
Libraries	$2,361,793	2.6%	$1,557,489	2.7%	$804,304	2.5%
Student Services	$4,178,236	4.6%	$2,684,343	4.6%	$1,493,893	4.7%
Institutional Support	$8,587,216	9.5%	$5,191,693	8.9%	$3,395,523	10.7%
Operation and Maintenance of Plant	$7,345,482	8.2%	$5,040,869	8.6%	$2,304,612	7.3%
Scholarships and Fellowships	$3,670,355	4.1%	$1,374,803	2.4%	$2,295,551	7.3%
From Unrestricted Funds	$1,961,597	2.2%	$569,058	1.0%	$1,392,539	4.4%
From Restricted Funds 1/	$1,708,758	1.9%	$805,745	1.4%	$903,012	2.9%
Mandatory Transfers	$1,015,613	1.1%	$591,269	1.0%	$424,344	1.3%
Other	---	---	---	---	---	---
Auxiliary Enterprises	$10,012,248	11.1%	$6,431,577	11.0%	$3,580,671	11.3%
Mandatory Transfers	$597,344	0.7%	$387,585	0.7%	$209,760	0.7%
Hospitals	$8,010,141	8.9%	$4,914,560	8.4%	$3,095,581	9.8%
Mandatory Transfers	$130,892	0.1%	$69,072	0.1%	$61,819	0.2%
Independent Operations 2/	$1,867,550	2.1%	$94,867	0.2%	$1,772,683	5.6%
Mandatory Transfers	$1,899	0.0%	$451	0.0%	$1,449	0.0%
Other	---	---	---	---	---	---

Current-Fund Expenditures of Institutions of Higher Education: By Purpose

In Constant 1980 Dollars (Dollars in Thousands)	1969-70					
	Total		Public		Private	
	Amount	Percent	Amount	Percent	Amount	Percent
Total Current Fund Expenditures	$47,287,888	100.0%	$29,774,261	100.0%	$17,513,634	100.0%
Educational and General Expenditures	$37,692,789	79.7%	$24,339,703	81.7%	$13,353,092	76.2%
Instruction	$15,469,312	32.7%	$10,632,908	35.7%	$4,836,411	27.6%
Research	$4,818,148	10.2%	$2,856,483	9.6%	$1,961,665	11.2%
Public Service	$1,171,119	2.5%	$1,069,840	3.6%	$101,279	0.6%
Academic Support	---	---	---	---	---	---
Libraries	$1,466,508	3.1%	$932,528	3.1%	$533,980	3.0%
Student Services	---	---	---	---	---	---
Institutional Support	---	---	---	---	---	---
Operation and Maintenance of Plant	$3,464,490	7.3%	$2,247,404	7.5%	$1,217,085	6.9%
Scholarships and Fellowships	$2,212,571	4.7%	$1,026,915	3.4%	$1,185,656	6.8%
From Unrestricted Funds	---	---	---	---	---	---
From Restricted Funds 1/	---	---	---	---	---	---
Mandatory Transfers	---	---	---	---	---	---
Other	$9,090,640	19.2%	$5,573,625	18.7%	$3,517,016	20.1%
Auxiliary Enterprises	$6,223,092	13.2%	$3,650,333	12.3%	$2,572,760	14.7%
Mandatory Transfers	---	---	---	---	---	---
Hospitals	$1,508,396	3.2%	$932,769	3.1%	$575,627	3.3%
Mandatory Transfers	---	---	---	---	---	---
Independent Operations 2/	$1,701,996	3.6%	$719,890	2.4%	$982,106	5.6%
Mandatory Transfers	---	---	---	---	---	---
Other	$161,616	0.3%	$131,566	0.4%	$30,049	0.2%
Inflation Index	0.445		0.445		0.445	

1/ Excludes aid received from the Pell Grant program.
2/ Generally includes only those expenditures associated with major Federally funded research and development centers.

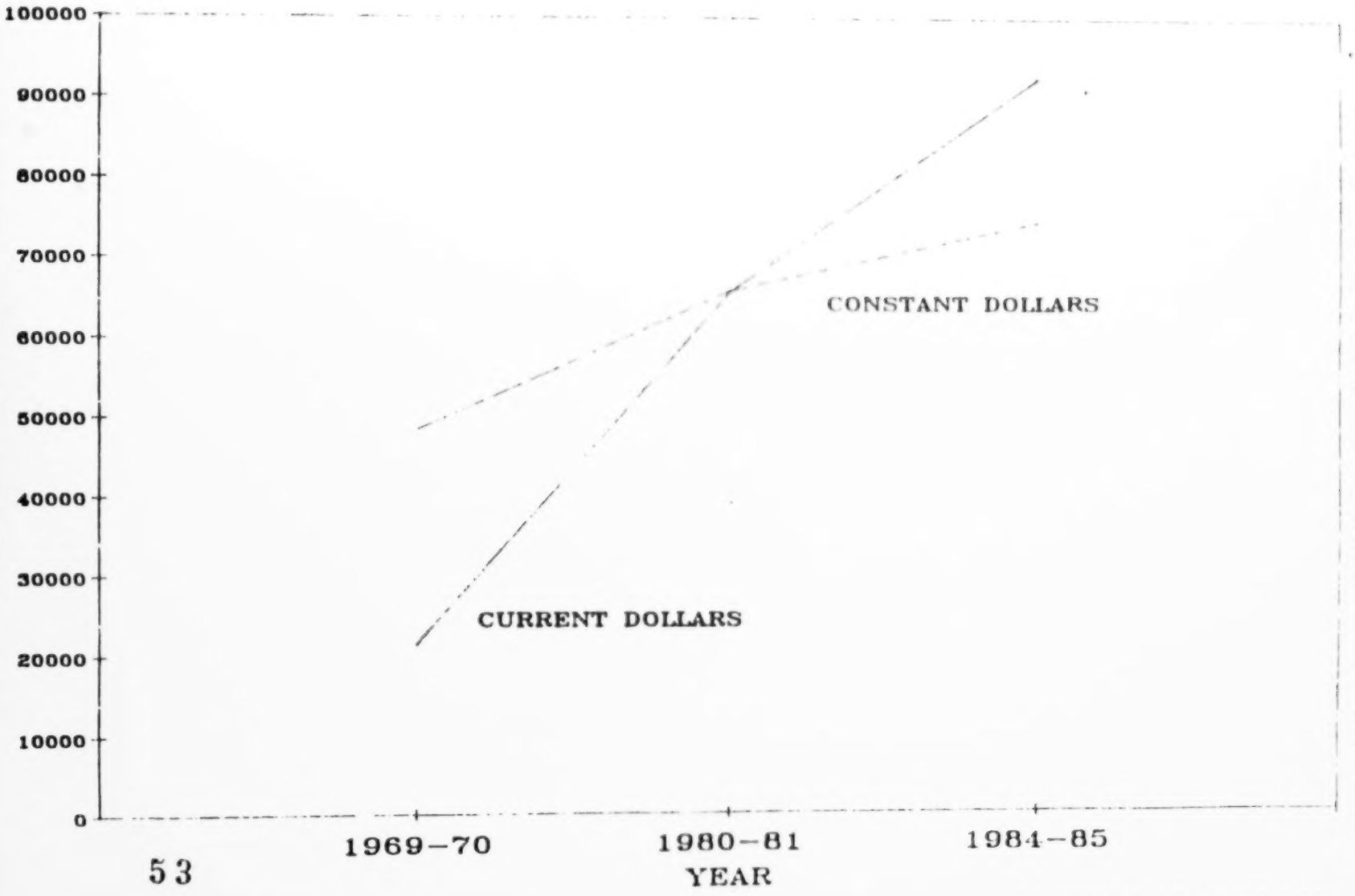
In Constant 1980 Dollars	1980-81					
(Dollars in Thousands)	Total		Public		Private	
	Amount	Percent	Amount	Percent	Amount	Percent
Total Current Fund Expenditures	$64,052,938	100.0%	$42,279,806	100.0%	$21,773,132	100.0%
Educational and General Expenditures	$50,073,805	78.2%	$34,173,013	80.8%	$15,900,792	73.0%
Instruction	$20,733,166	32.4%	$14,849,822	35.1%	$5,883,343	27.0%
Research	$5,657,719	8.8%	$3,813,350	9.0%	$1,844,369	8.5%
Public Service	$2,057,770	3.2%	$1,718,924	4.1%	$338,845	1.6%
Academic Support	$4,273,286	6.7%	$3,029,284	7.2%	$1,244,002	5.7%
Libraries	$1,759,784	2.7%	$1,187,116	2.8%	$572,667	2.6%
Student Services	$2,908,998	4.5%	$1,950,566	4.6%	$958,432	4.4%
Institutional Support	$5,772,515	9.0%	$3,563,194	8.4%	$2,209,321	10.1%
Operation and Maintenance of Plant	$5,350,310	8.4%	$3,681,921	8.7%	$1,668,389	7.7%
Scholarships and Fellowships	$2,504,525	3.9%	$1,064,864	2.5%	$1,439,661	6.6%
From Unrestricted Funds	$1,080,614	1.7%	$367,476	0.9%	$713,138	3.3%
From Restricted Funds 1/	$1,423,911	2.2%	$697,388	1.6%	$726,523	3.3%
Mandatory Transfers	$815,516	1.3%	$501,087	1.2%	$314,429	1.4%
Other	---	---	---	---	---	---
Auxiliary Enterprises	$7,288,089	11.4%	$4,658,140	11.0%	$2,629,948	12.1%
Mandatory Transfers	$508,377	0.8%	$344,043	0.8%	$164,335	0.8%
Hospitals	$5,433,111	8.5%	$3,377,972	8.0%	$2,055,139	9.4%
Mandatory Transfers	$57,963	0.1%	$26,613	0.1%	$31,349	0.1%
Independent Operations 2/	$1,257,934	2.0%	$70,681	0.2%	$1,187,253	5.5%
Mandatory Transfers	$643	0.0%	$322	0.0%	$321	0.0%
Other	---	---	---	---	---	---
Inflation Index	1.000		1.000		1.000	

In Constant 1980 Dollars

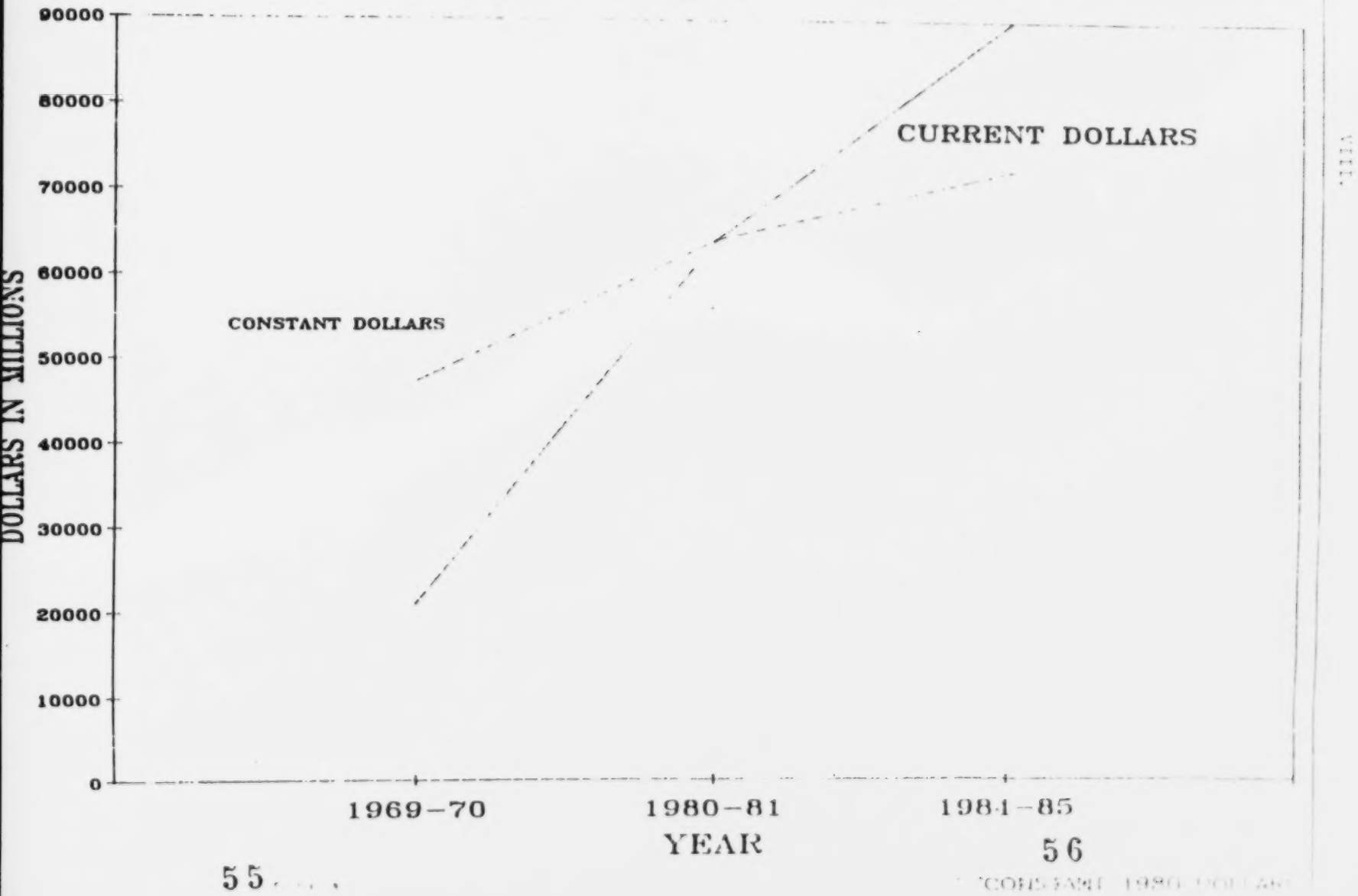
(Dollars in Thousands)

	1984-85					
	Total		Public		Private	
	Amount	Percent	Amount	Percent	Amount	Percent
Total Current Fund Expenditures	$72,192,025	100.0%	$46,801,404	100.0%	$25,390,620	100.0%
Educational and General Expenditures	$56,228,992	77.9%	$37,619,218	80.4%	$18,609,774	73.3%
Instruction	$23,095,652	32.0%	$16,282,030	34.8%	$6,813,622	26.8%
Research	$6,060,909	8.4%	$4,108,500	8.8%	$1,952,409	7.7%
Public Service	$2,296,224	3.2%	$1,858,965	4.0%	$437,259	1.7%
Academic Support	$4,875,002	6.8%	$3,425,119	7.3%	$1,449,884	5.7%
Libraries	$1,895,500	2.6%	$1,249,991	2.7%	$645,509	2.5%
Student Services	$3,353,319	4.6%	$2,154,368	4.6%	$1,198,951	4.7%
Institutional Support	$6,891,827	9.5%	$4,166,688	8.9%	$2,725,139	10.7%
Operation and Maintenance of Plant	$5,895,250	8.2%	$4,045,641	8.6%	$1,849,608	7.3%
Scholarships and Fellowships	$2,945,710	4.1%	$1,103,373	2.4%	$1,842,336	7.3%
From Unrestricted Funds	$1,574,315	2.2%	$456,708	1.0%	$1,117,608	4.4%
From Restricted Funds 1/	$1,371,395	1.9%	$646,665	1.4%	$724,729	2.9%
Mandatory Transfers	$815,099	1.1%	$474,534	1.0%	$340,565	1.3%
Other	---	---	---	---	---	---
Auxiliary Enterprises	$8,035,512	11.1%	$5,161,779	11.0%	$2,873,733	11.3%
Mandatory Transfers	$479,409	0.7%	$311,063	0.7%	$168,347	0.7%
Hospitals	$6,428,685	8.9%	$3,944,270	8.4%	$2,484,415	9.8%
Mandatory Transfers	$105,050	0.1%	$55,435	0.1%	$49,614	0.2%
Independent Operations 2/	$1,498,836	2.1%	$76,137	0.2%	$1,422,699	5.6%
Mandatory Transfers	$1,524	0.0%	$362	0.0%	$1,163	0.0%
Other	---	---	---	---	---	---
Inflation Index	1.246		1.246		1.246	

REVENUE OF INSTITUTIONS OF HIGHER EDUCATION
IN CURRENT AND CONSTANT DOLLARS



EXPENDITURES OF INSTITUTIONS OF HIGHER EDUCATION IN CURRENT AND CONSTANT DOLLARS



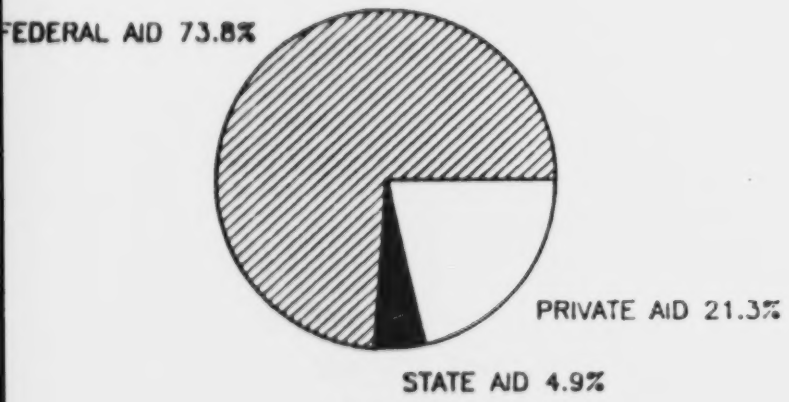
AID AWARDED TO POSTSECONDARY STUDENTS: IN CURRENT AND CONSTANT DOLLARS

($'s in millions)	1969-70		1980-81		1984-85	
Federally Supported Programs	Current Dollars	Constant 1980 Dollars	Current Dollars	Constant 1980 Dollars	Current Dollars	Constant 1980 Dollars
Generally Available						
Pell	---	---	2,387.1	2,387.1	3,035.3	2,436.0
SEOG	113.3	254.6	367.8	367.8	373.6	299.8
CW-S	173.5	389.9	660.2	660.2	645.1	517.7
NDSL	240.8	541.1	580.2	580.2	677.2	543.5
SSIG	---	---	76.8 1/	76.8	76.0 1/	61.0
GSL/PLUS	811.0	1,822.5	6,200.2	6,200.2	8,608.4	6,908.8
Subtotal	1,338.6	3,008.1	10,272.3	10,272.3	13,415.6	10,766.9
Specially Directed						
Social Security Benefits	499.0	1,121.3	1,883.0	1,883.0	35.0	28.1
Veterans Benefits	1,121.0	2,519.1	1,714.0	1,714.0	874.0	701.4
Other Grants	16.0	36.0	119.0	119.0	56.0	44.9
Other Loans	42.0	94.4	61.0	61.0	244.0	195.8
Subtotal	1,678.0	3,770.8	3,777.0	3,777.0	1,209.0	970.3
TOTAL FEDERAL	3,016.6	6,778.9	14,049.3	14,049.3	14,624.6	11,737.2
STATE SUPPORTED PROGRAMS	199.9	449.2	801.0	801.0	1,222.0	980.7
PRIVATE PROGRAMS	870.0	1,955.1	2,060.0	2,060.0	3,221.0	2,585.1
TOTAL -- ALL PROGRAMS	4,086.5	9,183.1	16,910.3	16,910.3	19,067.6	15,303.0
Inflation Index		0.445		1.000		1.246

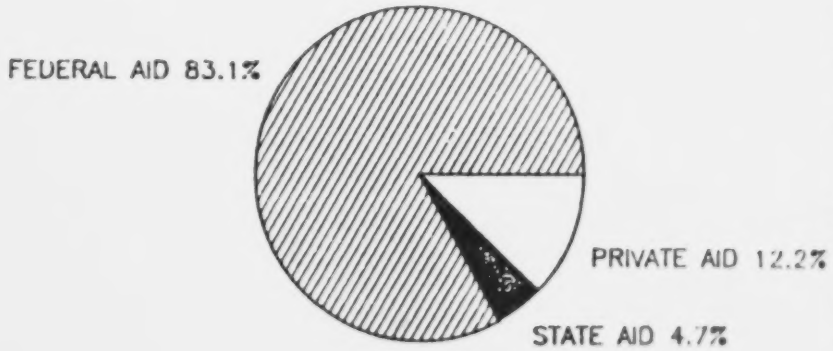
Notes: 1/ Does not include State match. State match is included under State supported programs.

Sources: Federal aid is taken from unpublished report maintained by the Office of Policy Development.
State and Private aid is taken from the College Board report entitled, Trends in Student Aid.

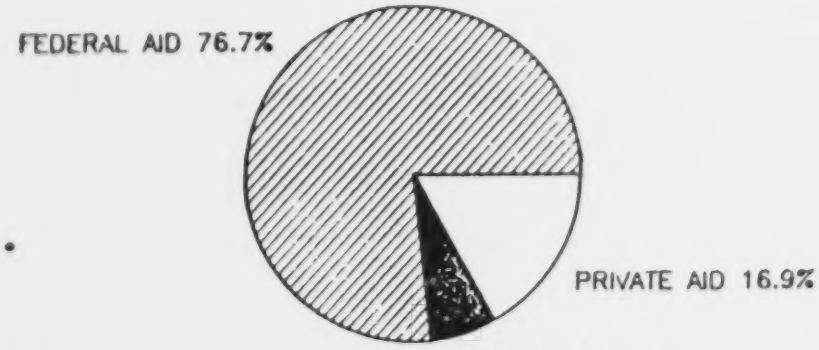
AID AWARDED TO POSTSECONDARY STUDENTS BY SOURCE



1969–70

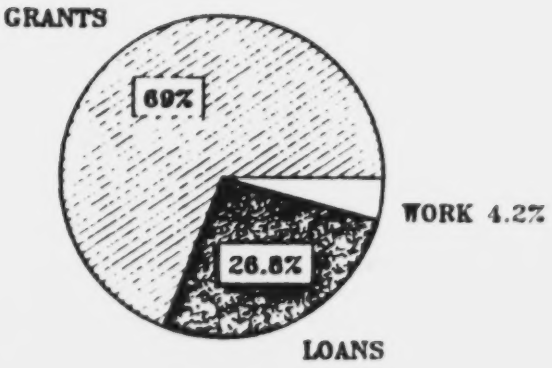


1980–81

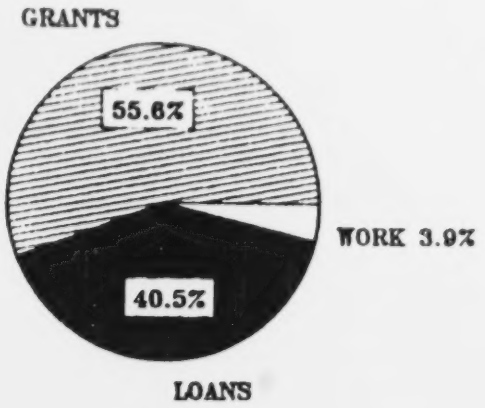


1984–85

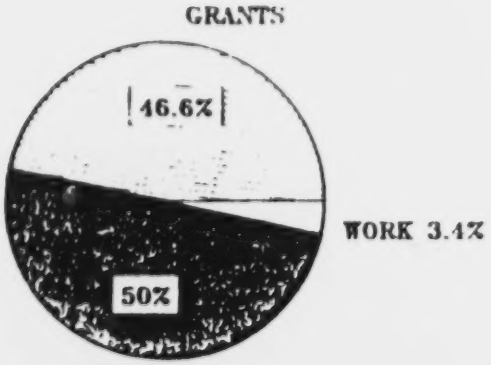
GRANTS, LOANS, AND WORK AS A PERCENT OF TOTAL AID
FROM ALL SOURCES



1969-70



1980-81



1984-85

SOURCES INCLUDE FEDERAL, STATE, AND PRIVATE PROGRAMS

ESTIMATED DIRECT EXPENDITURES FOR EDUCATION IN THE U.S.A. FOR 1986 - 1987

SOURCE BY LEVEL
(Percent of Total)

LEVEL	SOURCE FEDERAL	STATE	LOCAL	ALL OTHER*
EL-SEC 60%	5.7%	45.0%	40.0%	8.5%
(ED ONLY)	(4.6%)			
PSE 40%	12.1%	30.0%	2.4%	55.5%
(ED ONLY)	(6.7%)			
ALL LEVELS 100%	8.2%	39.1%	25.5%	27.2%
(ED ONLY)	(5.5%)			

* INCLUDES FEDERALLY-SUPPORTED STUDENT AID (ABOUT 3% OF TOTAL EDUCATION EXPENDITURES FOR 1985 - 1986)

Source: NCES Data, 12/86

Declining Youth Population With An Increasing At-Risk Segment Compared to Rising Business Demand For Entry-Level Employees

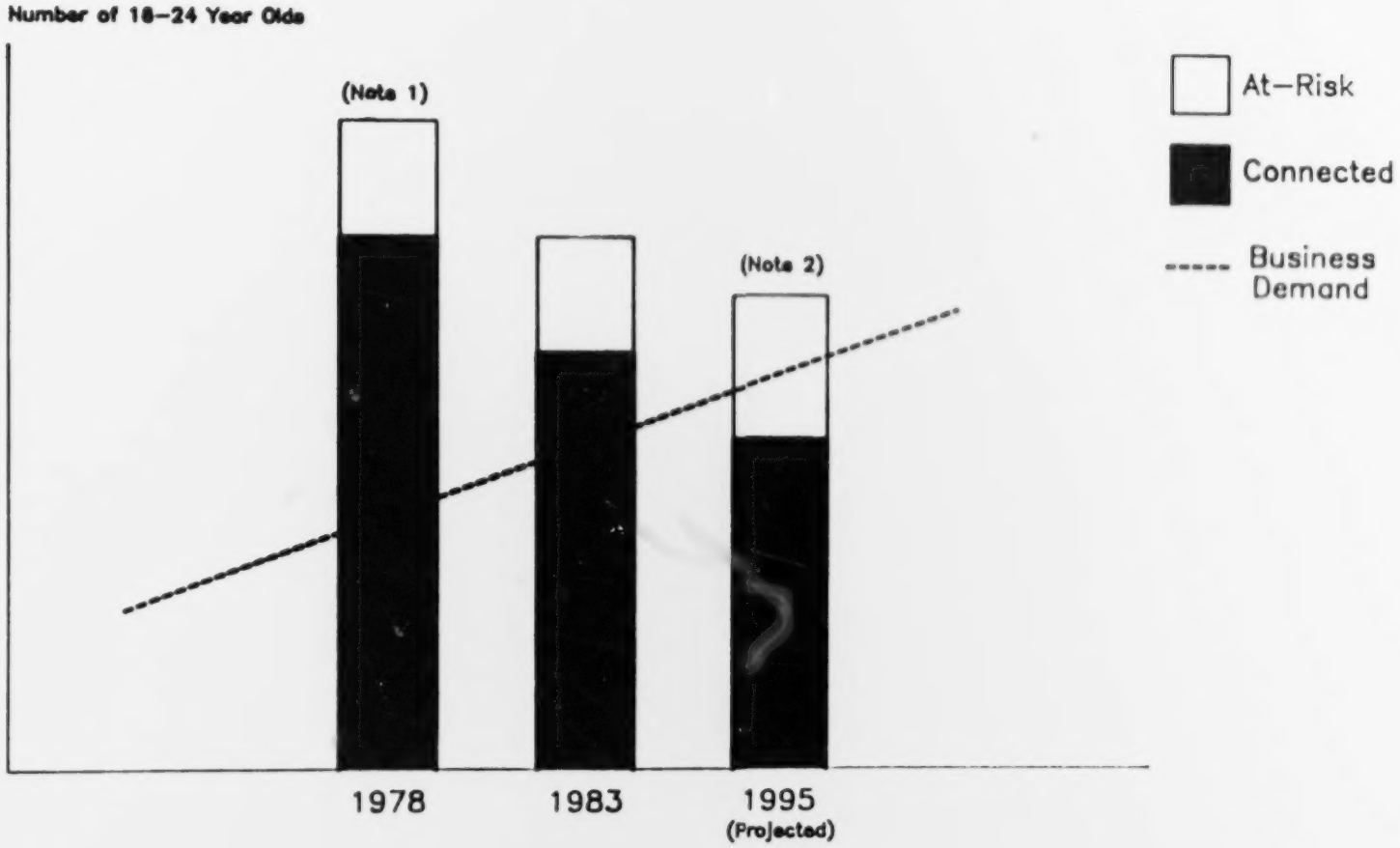


Fig. 1 Number of 16–24 yr. olds across time.

Notes: 1. 23% of Total U.S. Population
2. 16% of Total U.S. Population

Source: Reconnecting Youth. Education Commission of the States, 1985